



**GREEN  
CLIMATE  
FUND**

**Meeting of the Board**  
12 – 14 October 2016  
Songdo, Incheon, Republic of Korea  
Provisional agenda item 11(f)

**GCF/B.14/07/Add.05**

27 September 2016

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# Consideration of funding proposals – Addendum V

## Funding proposal package for FP022

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### **Summary**

This addendum contains the following three parts:

- a) A funding proposal titled “Development of Argan orchards in Degraded Environment - DARED” submitted by Agency for Agricultural Development (ADA);
- b) A no-objection letter issued by the national designated authority or focal point; and
- c) Environmental and social report(s) disclosure.

The documents are presented as submitted by the accredited entity, and national designated authority or focal point, respectively.



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Funding proposal submitted by the accredited entity

No-objection letter issued by the national designated authority or focal point

Environmental and social report(s) disclosure



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# Funding Proposal

Version 1.1

**The Green Climate Fund (GCF) is seeking high-quality funding proposals.**

Accredited entities are expected to develop their funding proposals, in close consultation with the relevant national designated authority, with due consideration of the GCF's Investment Framework and Results Management Framework. The funding proposals should demonstrate how the proposed projects or programmes will perform against the investment criteria and achieve part or all of the strategic impact results.

Project/Programme Title: Development of Argan orchards in Degraded Environment - DARED

Country/Region: Morocco

Accredited Entity: Agency for Agricultural Development

Date of Submission: 26 september 2016

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Section B	<b>FINANCING / COST INFORMATION</b>
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### *Note to accredited entities on the use of the funding proposal template*

- Sections **A, B, D, E** and **H** of the funding proposal require detailed inputs from the accredited entity. For all other sections, including the Appraisal Summary in section F, accredited entities have discretion in how they wish to present the information. Accredited entities can either directly incorporate information into this proposal, or provide summary information in the proposal with cross-reference to other project documents such as project appraisal document.
- The total number of pages for the funding proposal (excluding annexes) is expected not to exceed 50.

**Please submit the completed form to:**

[fundingproposal@gcfund.org](mailto:fundingproposal@gcfund.org)

Please use the following name convention for the file name:

“[FP]-[ADA]-[20160926]-[DARED 01]”

A.1. Brief Project / Programme Information		
<b>A.1.1. Project / programme title</b>	<b>Development of Argan orchards in Degraded Environment - DARED</b>	
A.1.2. Project or programme	Project	
<b>A.1.3. Country (ies) / region</b>	<b>Morocco</b>	
<b>A.1.4. National designated authority (ies)</b>	Ministry Delegate to the Ministry of Energy, Mines, Water and Environment, responsible for the environment	
<b>A.1.5. Accredited entity</b>	Agency for Agricultural Development	
A.1.5.a. Access modality	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> International	
A.1.6. Executing entity / beneficiary	Executing Entity: National Agency for the Development of Oases and Argan Zones (ANDZOA)  Beneficiary: 26 000	
A.1.7. Project size category (Total investment, million USD)	<input type="checkbox"/> Micro ( $\leq 10$ ) <input checked="" type="checkbox"/> Small ( $10 < x \leq 50$ ) <input type="checkbox"/> Medium ( $50 < x \leq 250$ ) <input type="checkbox"/> Large ( $> 250$ )	
A.1.8. Mitigation / adaptation focus	<input checked="" type="checkbox"/> Mitigation <input checked="" type="checkbox"/> Adaptation <input type="checkbox"/> Cross-cutting	
A.1.9. Date of submission		
A.1.10. Project contact details	Contact person, position	Mr Hamid FELLOUN, Director of Projects Management
	Organization	Agency for Agricultural Development of Morocco - ADA
	Email address	<a href="mailto:h.felloun@ada.gov.ma">h.felloun@ada.gov.ma</a> / hfelloun@gmail.com
	Telephone number	(+212)5 37 57 37 12/ (+212) 6 61 11 02 42
	Mailing address	<a href="http://www.ada.gov.ma">www.ada.gov.ma</a>
A.1.11. Results areas <i>(mark all that apply)</i>		
<p><b>Reduced emissions from:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Energy access and power generation (E.g. on-grid, micro-grid or off-grid solar, wind, geothermal, etc.)</li> <li><input type="checkbox"/> Low emission transport (E.g. high-speed rail, rapid bus system, etc.)</li> <li><input type="checkbox"/> Buildings, cities and industries and appliances (E.g. new and retrofitted energy-efficient buildings, energy-efficient equipment for companies and supply chain management, etc.)</li> <li><input checked="" type="checkbox"/> Forestry and land use (E.g. forest conservation and management, agroforestry, agricultural irrigation, water treatment and management, etc.)</li> </ul> <p><b>Increased resilience of:</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Most vulnerable people and communities (E.g. mitigation of operational risk associated with climate change – diversification of supply sources and supply chain management, relocation of manufacturing facilities and warehouses, etc.)</li> <li><input type="checkbox"/> Health and well-being, and food and water security (E.g. climate-resilient crops, efficient irrigation systems, etc.)</li> <li><input type="checkbox"/> Infrastructure and built environment (E.g. sea walls, resilient road networks, etc.)</li> <li><input type="checkbox"/> Ecosystem and ecosystem services (E.g. ecosystem conservation and management, ecotourism, etc.)</li> </ul>		

## A.2. Project / Programme Executive Summary (max 300 words)

Please provide a brief description of the proposed project/programme, including the objectives and primary measurable benefits (see [investment criteria in section E](#)). The detailed description can be elaborated in [Section C](#).

The recognition the natural argan forest (*Argania spinosa* (L.) Skeels), by UNESCO since 1998, as a Biosphere Reserve (RBA) highlighted its rich biodiversity and the economic opportunities. The argan oil "market boom" and its rising demand improved household income but generated serious pressure on the natural forest and reduced its natural regeneration thereby threatening its sustainability. Morocco vulnerability to climate change exacerbate such negative trend.

Morocco committed, also, within its INDC, to reduce its Greenhouse Gases (GHG) emission by 32% by 2030, through NAMAs. Arganiculture, aiming to plant 43.000 hectares of argan tree orchards, is a priority NAMA.

Through a large stakeholder consultation process involving 8 provinces and 31 rural communes, spread over six years and will require funding of \$ 49,2 million and target a 80 % grant from GCF and 20% as co-financing. The project aims to strengthen the resilience of rural communities and the arganeraie biosphere reserve through planting 10.000 ha of argan tree orchards with soil conservation and rain water harvesting capabilities, and supporting argan fruit producers' professional organizations and market access, and promoting beneficiaries capacity building, knowledge sharing and natural forest co-management. The activities once achieved pursue to contribute to relieve the anthropic pressure on the natural forest, improve livelihoods of the communities members mainly women. In the long-term, carbon sequestration is estimated at 604 223 Mt CO2 eq. this will contribute to set off a new business paradigm that stimulates change in "doing business as usual" from fruit collection from natural forest towards private investments to address the issues of climate change and unleash the full business potential of the biosphere value chain.

## A.3. Project/Programme Milestone

Expected approval from accredited entity's Board (if applicable)	30/10/2016
Expected financial close (if applicable)	26/12/2016
Estimated implementation start and end date	Start: <u>01/01/2017</u> End: <u>30/12/2022</u>
Project/programme lifespan	5 years ____0__ months

## B.1. Description of Financial Elements of the Project / Programme

Please provide:

- an integrated financial model in [Section I \(Annexes\)](#) that includes a projection covering the period from financial closing through final maturity of the proposed GCF financing with detailed assumptions and rationale; and a sensitivity analysis of critical elements of the project/programme

The use of GCF grants is justified by the lack of climate funding raised by Morocco so far and the African continent's share in terms of donations from the international community. The funding in grants for the project will be 80 % of the total project budget. This request is justified by the lack of locally available funding for this type of project as Morocco is a developing country and as such will need the support of the international community to contribute to the preservation of the RBA which is classified as World Heritage. The requested funding will help preserve the Argane natural forest and limit its degradation mainly resulting from climate change factors.

COMPONENT	GCF ( USD)	ANDZOA (USD)	ANDZOA's Partners (USD)	TOTAL BUDGET (USD)
Component 1	26 996 000,00	2 484 000,00	5 800 000,00	35 280 000,00
Component 2	7 773 600,00	836 400,00	0,00	8 610 000,00
Component 3	4 523 000,00	775 000,00	0,00	5 298 000,00
Total budget of Project	39 292 600,00	4 095 400,00	5 800 000,00	49 188 000,00

The project will be implemented in three components:

**Component 1 (35,3 Million USD)** : planting argane tree orchards on an area of 10 000 hectares with grants of 35,3 million US dollars. This financing requirement is justified by the difficulty of raising alternative sources of funding given the vulnerability of beneficiaries and the difficulty of access to universal financial products in Morocco. The contribution of ANDZOA and its partners including the beneficiaries will amount to 24% of component 1. This co-funding in grants allocated from ANDZOA's operating budget will contribute to the implementation of NAMA Arganiculture. The beneficiary's contribution will focus on the maintenance of orchards (trimming and maintenance) after the first two years of planting. Land contributions to the project in kind will be made by some of the beneficiaries.

Water resources availability for irrigation is a key success factor for this project. The Agence du Bassin Hydraulique Sous-Massa Draa, an important partner involved in the project, conducted a study on rainwater harvesting and identified the implantation sites and the appropriate techniques<sup>1</sup>. The need for funding for this activity is justified because of the low budget available from the implementation partner for the construction and/or rehabilitation of such infrastructure. The proposed co-financing will address the technical assistance of the catchment works and the supervision of their construction.

The success of plantations necessarily requires technical assistance for the duration of the project as justified by the large areas to be planted and given the innovative experience for the domestication of the Argane tree in the orchard. Technical assistance during this project will be funded by the grant. This contribution will be downgraded in the next phases of NAMAs Arganiculture program.

Component	Sub-component	budget (for entire project) in Million USD	budget (for entire project) in Million dollars USD	funding request from GCF (\$ Million US)	Currency disbursement recipient

<sup>1</sup> Beside securing water delivery and safeguarding water resources, the Water Resource Integrated Development Master Plan for the Souss basin A [19] aims to protect the argan ecosystem and boost the up/downstream solidarity. The average water demand in 2030 is estimated at 654 M3 in the souss basin with a 15% gap; to satisfy this demand an investment plan of approximately 1, 273 billion dollars has been designated.

Component 1: implementation of arganiculture on 10 000 ha	1.1. Arganiculture on 10,000 ha	26,0	26,0	20,0	Million dollars USD
	1.2. medicinal and aromatic plants Intercropped with argane on 2000 ha	2,2	2,2	2,2	Million dollars USD
	1.3. Water harvesting and water and soil conservation	5,2	5,2	3,0	Million dollars USD
	1.4. Technical assistance and works supervision	1,8	1,8	1,8	Million dollars USD
<b>total component 1</b>		<b>35,3</b>	<b>35,3</b>	<b>27,0</b>	<b>Million dollars USD</b>

Component 2 of the project ( 8,6 Million USD) : is about the organization of the upstream components of the argane value-chain through support of fruit producers cooperatives and "Groupement d'Interet Economique" (GIE) or interest groups in order to improve market access for the products. The implementation of this component requires funding in the form of a grant from the GCF and co-financing by ANDZOA's budget and contributions of beneficiaries.

Component	Sub-component	budget (for entire project) in Million USD	budget (for entire project) Million dollars USD	funding request from GCF (\$ Million US)	Currency of disbursement
Component 2: Organization of the upstream components of the argane value-chain	2.1: Professional organizations on the upstream of Argan sector structured and GIE	0,9	0,9	0,9	Million dollars USD
	2.2: Argan's products are valued	7,7	7,7	6,9	Million dollars USD
<b>total component 2</b>		<b>8,6</b>	<b>8,6</b>	<b>7,8</b>	<b>Million dollars USD</b>

Component 3 ( 5,3 Million USD) aims to strengthen the Arganeraie Biosphere actors' capacities to manage and adapt to climate and will contribute to rehabilitate the Argan naturel forest. The project will address these shortcomings in the sites that have not had the opportunity to benefit from major field training on adaptation to Climate Change. Local communities have valuable ancestral indigenous knowledge they used in adapting to climate change and resources scarcity. The consultation workshops organized while developing this proposal confirmed that there is an awareness that climate change exacerbated usual risks. The GCF grant will contribute to the establishment of the Argane national center of excellence that will channel the efforts of all scientific and professional actors and will promote a cluster of cultural heritage of the Argan tree.

Component	Sub-component (if applicable)	budget (for entire project) in Million USD	budget (for entire project) Million dollars USD	funding request from GCF (\$ Million US)	Currency of disbursement
Component 3 : capacity building, knowledge management, Co- management of Natural Argan Forest and scientific	3.1: Climate change management Capacities of institutional actor, elected representatives and professional organizations are reinforced and developed and RBA co-management are implanted	3,4	3,4	2,7	Million dollars USD
	3.2: Argan research is consolidated and encouraged	1,9	1,9	1,8	Million dollars USD

research promotion					
total component 3		5,3	5,3	4,5	Million dollars USD

- a description of how the choice of financial instrument(s) will overcome barriers and achieve project objectives, and leverage public and/or private finance

The funding through grants helps to contribute to the implementation of NAMAs arganiculture but will also accelerate the implementation of the Argan program which aims to address challenges and pressure on the biosphere, promoting arganiculture and carbon sequestration as demonstrated in the NAMAs arganiculture. Also, Morocco committed to contribute to the international efforts of reducing greenhouse gases and has already set clear objectives and plans in its national plan ( INDC ) officially presented in June 2015. Morocco's INDC committed to 32% greenhouse gases emission reduction by 2030 compared to its projected emissions for the same year according to its "doing business as usual" scenario. This commitment requires that Morocco gain access to new sources of funding and additional support compared to that received in recent years .The need for additional financing was raised by Morocco at the United Nations Climate Conference. The required budget is around \$ 45 billion USD of which 35 billion are conditioned by international support through new mechanisms of climate finance.

Moreover, the argane natural forest faces major challenges because of its geographic location at the frontier of one of the hottest deserts in the world, and the predicted impacts of climate change on the area predict a temperature Increase of 0.6 to 1.1 °C , and a rainfall decrease between 10 to 15 % by 2020 <sup>2</sup>. Such trends threaten fruit production and the stability of vital ecosystem services provided by the natural forest. Without international support Morocco will not be able to face these serious threats.

Another key outcome of the grant program is to promote self-financing by the interest groups by developing their capacity to gain access to equity finance. This process will make these interest groups and cooperatives bankable and attract investment funds to Arganiculture and create interest for new financing mechanisms (In a way similar to what happened in other sectors like( Citrus , OLIVE ... ) where the regular banking system took more interest as the industry became more structured and profitable).

## B.2. Project Financing Information

	Financial Instrument	Amount	Currency	Tenor	Pricing		
(a) Total project financing	(a) = (b) + (c)	.....49,2... .....	million USD (\$)				
(b) GCF financing to recipient	(i) Senior Loans	.....	Options	( ) years	( ) %		
	(ii) Subordinated Loans	.....	Options	( ) years	( ) %		
	(iii) Equity	.....	Options		( ) % IRR		
	(iv) Guarantees		Options				
	(v) Reimbursable grants*		million USD (\$)				
	(vi) Grants *	...39,3...	million USD (\$)				
	* Please provide economic and financial justification in <a href="#">section F.1</a> for the concessionality that GCF is expected to provide, particularly in the case of grants. Please specify difference in tenor and price between GCF financing and that of accredited entities. Please note that the level of concessionality should correspond to the level of the project/programme's expected performance against the investment criteria indicated in <a href="#">section E</a> .						
	Total requested (i+ii+iii+iv+v+vi)	39,3...	million USD (\$)				
(c) Co-financing to recipient	Financial Instrument	Amount	Currency	Name of Institution	Tenor	Pricing	Seniority
	Grant	4,10	million USD (\$)	ANDZOA	( ) years	( ) %	Options
	Grant	5,0	million USD (\$)	DRA SM	( ) years	( ) %	Options

<sup>2</sup> : [http://www.fao.org/nr/climpag/pub/FAO\\_WorldBank\\_Study\\_CC\\_Morocco\\_2008.pdf](http://www.fao.org/nr/climpag/pub/FAO_WorldBank_Study_CC_Morocco_2008.pdf)

	<u>Grant</u> <u>Grant</u>	0,80	<u>million</u> <u>USD (\$)</u>	<u>ABH SM</u>	( ) years	( )% IRR	<u>Options</u> <u>Options</u>
	Lead financing institution: ANDZOA						
	*						
<b>(d) Financial terms between GCF and AE (if applicable)</b>	<p><i>In cases where the accredited entity (AE) deploys the GCF financing directly to the recipient, (i.e. the GCF financing passes directly from the GCF to the recipient through the AE) or if the AE is the recipient itself, in the proposed financial instrument and terms as described in part (b), this subsection can be skipped.</i></p> <p><i>If there is a financial arrangement between the GCF and the AE, which entails a financial instrument and/or financial terms separate from the ones described in part (b), please fill out the table below to specify the proposed instrument and terms between the GCF and the AE.</i></p>						
	<b>Financial instrument</b>	<b>Amount</b>	<b>Currency</b>	<b>Tenor</b>	<b>Pricing</b>		
	Choose an item.	.....	<u>Options</u>	( ) years	( )%		
	<p><i>Please provide a justification for the difference in the financial instrument and/or terms between what is provided by the AE to the recipient and what is requested from the GCF to the AE.</i></p>						
<b>B.3. Financial Markets Overview (if applicable)</b>							
<p><i>How market price or expected commercial rate return was (non-concessional) determined?</i>  <i>Please provide an overview of the size of total banking assets, debt capital markets and equity capital markets which could be tapped to finance the proposed project/programme.</i>  <i>Please provide an overview of market rates (i.e. 1-year T-Bill, 5-year government bond, 5-year corporate bond (specify credit rating) and 5-year syndicate loan.</i>  <i>Provide examples or information on comparable transactions.</i></p> <p>No other potential funding sources have been identified. Climate change mitigation activities have concentrated resources in the Green Climate Fund (GCF) as a strategy to centralize the decision-making process, thus providing clear, transparent and fact-based guidance and developing funding criteria through a consensus-building process between donors and developed and developing nations.</p> <p>Local population lack access to finance especially for organiculture. In addition, the organiculture sector in Morocco is a new agriculture sector and is not an attractive investment opportunity for banks because of its perceived high risk today. Due to this, private sector financing is not available. The project aims to address these barriers in order to allow the local population and community to access funding.</p> <p>ANDZOA remains the only entity responsible for promoting the sector of organiculture in the area and is the sole financial contributor for the implementation of this project. Other Entities (ABH and DRA and beneficiaries) will help finance the project. Their contribution is reflected in the financing set up of the project.</p>							

Please fill out applicable sub-sections and provide additional information if necessary, as these requirements may vary depending on the nature of the project / programme.

## C.1. Strategic Context

Please describe relevant national, sub-national, regional, global, political, and/or economic factors that help to contextualize the proposal, including existing national and sector policies and strategies.

### 1. NATIONAL CONTEXT

#### 1.1. Argan Biosphere Reserve (RBA) in Morocco

Morocco is the universal depository of the Argane tree and UNESCO had labeled the argan tree's geographic range as the Argan Biosphere Reserve<sup>3</sup> (RBA) in 1998. This Biosphere covers an area of approximately 2.5 million hectares where the Argan tree holds first place with a total covered tree area of 829,087 ha, or 60% of the total forest area.

Several studies and research tried to measure degradation trends of the argane natural forest by monitoring the evolution of its general area and land cover density<sup>4</sup>. These studies were implemented in different sites of the RBA. Reported degradation levels vary from one area to another and depend on the nature of the pressures they are subjected to. The Ademine argane forest, is undergoing pressure from urbanization because of its location on the frontier of the fast growing city of Ait Melloul, and its annual loss is estimated at 600 ha (EL Yousfi, M.S., 1988).

Another study investigated an area of 100,000 hectares in the province of Taroudant where the argane forest degradation in terms of density was measured on the basis of aerial photos and satellite images. This study revealed a density loss of 44, 5% between 1970 and 2007, mainly due to desertification (Polain Waroux, 2011). Airborne Data collection and satellite sensing of the Haha Argan forest revealed a density loss rate estimated at - 2.04% in 22 years and a surface loss of - .21% in 13 years. (El Wahidi, 2013).

In the mountainous area of Ait Baha, data showed that argane tree cover appears to be stable between 2003 and 2011, however, an estimated 2 to 3% of the trees present in 2003 disappeared in 2011. This relative stability confirms that, in the mountainous area, no significant degradation of the "arganeraie agro-ecosystem is noticed. (Aouragh, 2012).

The study on the state of degradation of the Mesguina forest at the frontier of Agadir city, between 1988-2015 revealed a surface loss of 203 hectares of argane due to urban settlements (an annual rate of 7.5%). Major differences are noticed from mountain areas with 59 ha (an annual rate of 2.2%) and 416 ha in the plain area (an annual rate of 15.4%). A density loss was recorded in the plain area of 381 ha (an annual rate of 14.1%). (Eddaif, 2016).

#### 1.2. Importance of Biodiversity RBA

Since the argan woodland serves as foundation species for over 1,200 species (Aymerich and Tarrier 2010), the intensifying pressure on the natural argane forest may threaten the broader biodiversity of the Acacia-Argania eco-region.

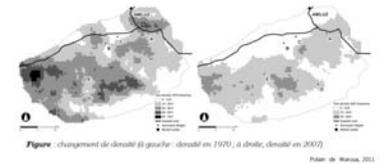


Figure : image diachronique IKONOS 2003/ Google 11 de la zone d'Ait-Onakrim (Ait-Baha)

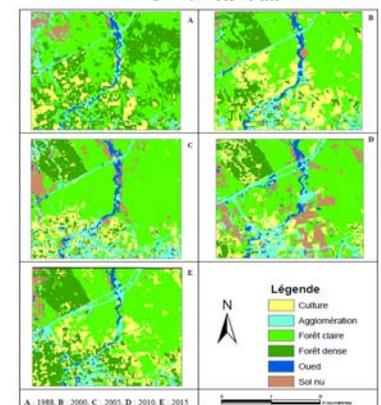
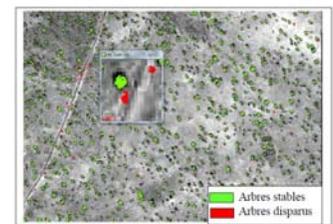


Figure : Evolution de l'état de l'arganeraie de Mesguina (20 km d'Agadir) entre 1988 et 2015

Eddaif, 2016

3 : [www.unesco.org](http://www.unesco.org)

4. EL Yousfi, S.M. (1988). La dégradation forestière dans le Sud marocain. Exemple de l'arganeraie d'Ademine (Souss) entre 1969 et 1986, mémoire de 3e cycle, I.A.V. Hassan II, Rabat, 117 p./Benzyane, M, 1995 - Le rôle socio-économique et environnemental de l'arganier. Polain de Waroux, Y, 2011 - La dégradation de l'arganeraie et ses causes dans la province de Taroudant. El Wahidi, F, 2013 - Thèse de doctorat : Dynamiques des dégradations de l'arganeraie et modélisation spatiale de l'évolution forestière : scénarios d'aménagement pour une gouvernance locale.

### 1.3. Arganiculture and climate change

It is obvious that the success of the regeneration of the natural forest is closely dependent on rainfall. However, the mobilization and effective participation of the local users is also important. At this level, the capacity for action and the availability of resources are most critical. Ecological factors alone cannot guarantee the success of its artificial regeneration. This is considered to be a long process requiring in addition to technical resources significant contributions from the social environment (fig.3).

Climate change impact on argane woodlands is of great interest as this ecosystem is of vital importance for human livelihoods and local biodiversity. In fact during the last glacial period maximum (21,000 BP) suitable for forest growth occurred at more southern latitudes, where the Sahara desert currently lies, while suitable areas in the mid-Ho locene period shifted northwards, occupying areas similar to those of today. The current range constitutes 44% of the potential land distribution of the forest, primarily reflecting anthropic land-use patterns. Future climate change is forecast not to cause latitudinal/altitudinal range shift, but rather an overall contraction of its range. (fig4)<sup>5</sup>.

Considering the climate-based predictions and the important role of argane woodlands in preventing desertification and maintaining the local social and economic systems dependent on this key ecosystem, vigorous efforts should be made to protect all currently established argane woodlands<sup>6</sup>

### 1.4. Arganiculture to reduce pressure on the naturel forest

There is a serious mismatch between locals' conservation incentives and the long run sustainability criteria for maintaining a healthy argan forest. Fruit collection and market prices are the most important motivations for locals. The project, offering additional fruit resources, will contribute to solving this mismatch through supporting the emergence of a high value kernel market from sustainable production practices. This will allow users to sell higher quantities of harvested kernels and is the best way to solving real rural poverty alleviation.

### 1.5. Sensitivity to desertification and land degradation

The most decisive factor of sensitivity to desertification and land degradation in the argane woodland is the pressure due to overgrazing, which is visible on almost 67% of this area. Low levels of pasture productivity and frequent use by herds from outside the argan forest range worsen land degradation of the biosphere.

## 2. NATIONAL STRATEGY

### 2.1. Climate Change Policy In Morocco (CCPM)

Climate Change Policy in Morocco (PCPM) include strategic, horizontal and sectoral perspectives, for both mitigation and adaptation. This policy puts "green growth" in its economic and social priorities; these priorities are embodied in four pillars which aim to achieve a reduction in the overall carbon footprint and build a development model that is more resilient to the impacts of the climate change:

- Governance pillar favouring a participative and decentralized approach;
- Economic Pillar, implementing an inclusive green economy;
- Social Pillar, for the integration of social aspects in all public policy;
- Environmental Pillar, for the integration of the environment as a central concern of all socioeconomic and territorial development.

The sectoral strategic axes hold back national priorities of various ministerial departments, in their sectors of mitigation and adaptation to climate change. Eventually, a process of identification and coordination of policies and the sectoral measures will be set up to insure a complete plan of action to realize the CCPM. The six transverse strategic axes of the CCPM aim at:

Fig 3: Argane natural forest regeneration area evolution from 1998-2012 and the link with the variation in rainfall (Cumulative area 14,600 ha). (Source, HCEFLCD, Congrès International de l'Arganier 2011 Agadir Morocco)

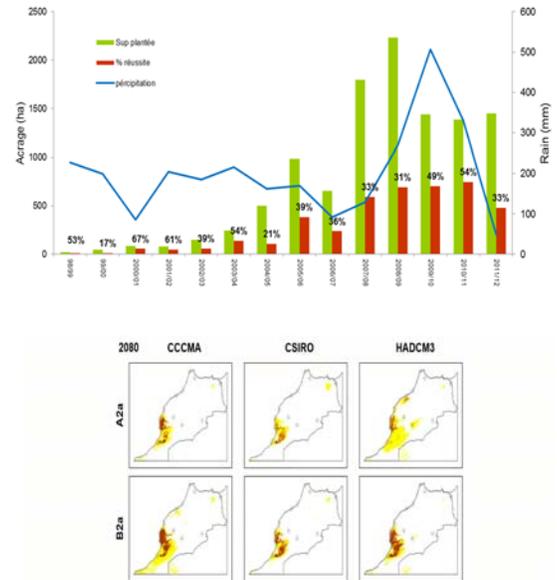
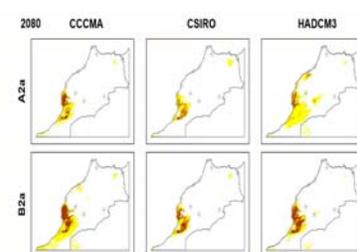


Fig. 4. Predicted potential distribution of Argania sponosa under future climate scenarios for 2080. A2a and B2a SRES scenarios based on simulations of three general circulation models: HADCM3, CSIRO and CCCMA.



<sup>5</sup> Alba-Sanchez F. J. Lopez-Saez ; D. Nieto-Lugilde ; JC. Svenning. 2015. Long-term climate forcing to assess vulnerability in North Africa dry woodlands. *Applied Vegetation Science*. 18: 283-296

<sup>6</sup> Alba-Sanchez F. all 2015 in long-term climate forcing to assess vulnerability in north Africa dry argan woodlands.

- Strengthening the legal and institutional framework, by concrete legal and statutory measures, according to the capacities of outline law of the National Charter of the Environment and Sustainable development published in 2014;
- Improving knowledge and observation to strengthen the capacities of observation, follow-up and forecast the impacts of climate change;
- Commit to territorial implementation, by the taking into consideration the territorial specificities and the active commitment of local communities to implement the national objectives in Territorial Plans to fight Global warming (PTRC).
- Early warning to Reduce Climate Risks in order to improve ecosystems' and population's adaptation capacities
- Stakeholders empowerment through capacity building and awareness raising for better skills necessary to adapt and mitigate climate change impacts;
- Promote research, innovation, knowledge and technology transfer in order to develop the scientific and technological capacities for forecasting, mitigation and adaptation

In this dynamic, national initiatives were engaged to improve the resilience to climate change and reduce the emissions of GHGs. We shall quote, for illustrative purposes, the adoption of the National charter of the Environment and the Sustainable development in 2011; this charter defines the rights and the obligations of the State and the citizens for protection of the environment and sustainable economic development. In the same trail, the new constitution of July, 2011 puts the "accent on the objective of sustainability of the environment. Morocco signed in May, 2012 Declaration on Green growth of the Organization of Cooperation and of Economic development (OECD), to reach economic recovery and a long-lasting economic growth on the environmental and social fronts. Also, the Government of Morocco published in March, 2014 an outline of the National Charter of the Environment and the Sustainable development laws. The Government aspires to promote investments in green industries and technologies to strengthen sectors such as the fish farming and the ecotourism, and to contribute to efficiencies in sectors such as agriculture.

**a. National Plan of Adaptation (National Adaptation Plan -NAP),**

For the adaptation sector, a National Plan of Adaptation (National Adaptation Plan -NAP), in an ongoing process, will identify the priority activities to fulfil the urgent and immediate needs for adaptation to climate change. For the agriculture sector, MAF has a wide range of projects dealing with adaptation to climate change, most of them have already been implemented.

**b. Nationally Appropriate Mitigation Actions - NAMAs**

Regarding mitigation, a low carbon emissions development Strategy (Low Emission Development Strategy - LEDS) is in the course of finalization. And Morocco's INDC committed to a 32% greenhouse gases emission reduction by 2030 compared to its projected emissions for the same year according to its "doing business as usual" scenario. This strategy will take into account the mitigation Measures suited to the national level (Nationally Appropriate Mitigation Actions - NAMAs) covering the majority of the branche of industry generating GHGs.

**- Nationally Appropriate Mitigation Actions – NAMA Arganiculture**

NAMAs which are part of the low carbon development strategy (Low Emission Development Strategy - LEDS) as adopted at COP15 in Copenhagen. NAMA Arganiculture is selected as on the top the three priority NAMAs for the agricultural sector in Morocco.

The purpose of the Appropriate Mitigation Measures at the National Level (NAMA) is to develop the arganiculture program (cultivation of the argan tree in orchards), mainly through domestication of the argane tree (*Argania spinosa* (L) Skeels) and establishment of a farming system that will include intercropping and associations with forage crops or aromatic plants on an area of 43,000 Ha, with a total potential estimated area of 3 million Ha.

This program will increase the carbon storage in biomass and soils. It will mitigate the industrial and anthropogenic pressure on natural argane forest. NAMA arganiculture program plan proposes offering natural forest users new options and agricultural model based on the cultivation of the argan tree as a high value plant within the Pillar II of the Green Morocco Pan. This is implemented to support and sustain the actual Agroforestry system.

The domestication of the Argan tree and its cultivation in orchards would turn it into an oilseed crop for oil production. Thus, next to the wild Argan tree (Protected areas as a priority), planting argan trees in orchards while combining their oil with that from other cultures will consistently increase its productivity and the quality of the oils. Argan trees will be produced from healthy plants with good genetic qualities allowing for a controlled process (Tree Resource Domestication) of cultivation and monitoring of the environment as well as selection of cultivars to ensure consistent quality. The domestication of the argan tree opens up significant economic opportunities for Morocco because it is expected to face a growing demand year after year for quality argan oil and will help reduce and eliminate pressure on the wild Argan forest.

**2.2. Morocco Green Plan - PMV**

Integrating climate change in the Green Morocco Plan<sup>7</sup> was a prerequisite. This is illustrated in particular through the guidelines and the following priority action plan:

- The formalization and implementation of projects within the framework of improving the resilience of agriculture to future climate change and the preservation of land and biodiversity;
- The promotion and integration of climate change into adaptation technologies through projects and through the dissemination of selected and certified seeds, the use of water and soil conservation techniques, wider use of fertilizers and good agricultural practices;
- Support the development of renewable energy use in agriculture, particularly solar, wind and biogas;
- The establishment of an ambitious program around the development of water resources: National Irrigation Water Savings Program;
- The contribution of Agriculture, through the measures taken under the PMV to allow the sequestration of 61.7 million T.eq. of CO<sub>2</sub>

As part of the PMV, Morocco has redefined its objectives in a global context concerning food security, climate change, the rising prices of agricultural products, producer responsibility and the fight against poverty.

The PMV is based on redesigning the sectoral framework and the improvement of cross-cutting factors, particularly in regard to water policies, land and inter-professional organization.

*The dimension of climate change* is the subject of the seventh foundation of the PMV, which is the preservation of natural resources for sustainable agriculture. The seventh foundation is based on:

- The implementation of projects within the framework of improving the resilience of agriculture to future climate change and the preservation of land and biodiversity;
- Integration in PMV projects, technologies for adaptation to climate change through the dissemination of selected and certified seeds, the use of water and soil conservation techniques, fertilization of crops and good agricultural practices;
- Supporting the development of the use of renewable energy, particularly solar, wind and biogas;
- The establishment of the National Water Saving Irrigation Program (Programme National d'Économie d'Eau en Irrigation) ;
- Development of Cultivated Soil Fertility Maps, for better crop productivity at the national level;
- The National Programme for Agricultural Lands Mapping (programme national de Cartes de Vocation Agricole des Terres) for efficient use of agricultural land.

It is primordial to highlight that Arganiculture is a main component of the Green Morocco Plan (GMP) which aims to support government efforts in order to relieve the pressure on argan forest zones, improve the living conditions of local populations by increasing their incomes, and increase their resilience through diversification of activities with less reliance on the argan forest areas and critical water resources.

### 2.3. Argan policy development

The strategic orientations on Argan were formalized through the "contrat programme arganier" (CPA) a collaborative agreement signed in 2010 in order to support economic and social development through promotion of argan ecosystem conservation and argan value chain development. This agreement involves the MAF, the HCEFLCD, the Moroccan Argan Professional Organization (FIMARGAN), the National Agency for Development of Oases and Argan Tree Zones (ANDZOA) is the institution in charge to coordinate this CPA and develop synergies with all stakeholders.

## 3. INSTITUTIONS, ORGANISATIONS AND LAW

### 3.1. *National Agency For The Development Of Oasis And Argane Tree Zones (Andzoa)*

The National Agency for the Development of Oases and Argan tree Zones (ANDZOA) was created in 2010 under the supervision of Ministry of Agriculture and Fisheries to promote integrated development of two major Biosphere reserves of Morocco Arganeraie and Oasis of Morocco. The specific mission of ANDZOA is to design, in coordination with government authorities, elected representatives and all stakeholders, a global integrated development program of the territories under its authority to ensure its implementation and monitoring.

The Oasis and Arganeraie territories covers almost 40% of the national territory. It includes 5 administrative regions, and 16 provinces, and 388 local communes. The specific goals in the argane areas for ANDZOA are to:

- Ensure the argane tree areas preservation, protection and development including the implementation of socio-economic projects;

<sup>7</sup> *The agricultural strategy aims to accelerate growth, reduce poverty, ensure the long-term sustainability of the sector and consolidate its integration into national and international markets.*

- *Pillar I focuses on the development of productivist and modern agriculture and responding to market rules based on private investment in high-value and high-productivity sectors.*
- *Pillar II concerns the accompaniment of a solidarity agriculture and the fight against poverty particularly in areas with fragile economy and, improving incomes of poor farmers through intensification, diversification and the valorisation of local agricultural products.*

- foster Argane forest rehabilitation in accordance with forestry laws and regulations
- Conduct or supervise the projects implementation for argan tree products valuation, marketing, promotion and labeling, especially under contracts or agreements- program to be concluded with the Agency;
- Structure argan tree production and marketing in the partnership with different stakeholders including the concerned people;
- Encourage scientific research for the protection of the argan tree protection, its development as a viable tree crop, and increase valuation of the supply chain of its products..

To promote and develop the argan value chain, a contract-program was signed in 2011, between the government and the Argan Moroccan Federation Interprofessional (FIMARGANE). This contract- program plans, in 2020, to :

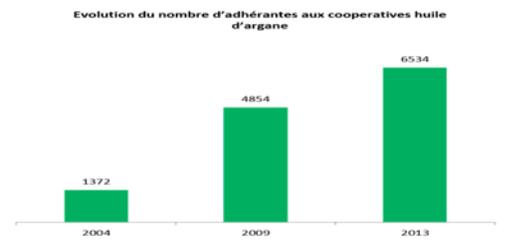
- Rehabilitation of 200,000 hectares of natural argan tree;
- Domestication of the argan tree and extension in modern orchard (arganiculture) on 5,000 Ha;
- Promotion of the argane "Protected Geographical Indications " Label and its products and derivatives on the international market;
- Increasing argan oil production to reach, in 2020, 10.000 tons / year (currently estimated at 4.000 tonnes / year);
- Establishment of argan Pillar I and Pillar II projects to integrate in a more efficient manner the international market.

Regarding the natural conditions which are favorable, the potential land area for arganiculture identified is 43.000 hectares distributed in 8 provinces (cf NAMA- Arganiculture) and considering ADA's size by project category and accreditation the necessary implementation delay for achieving its completion we suggest executing it in three phases by 2030.

### 3.2. Professional Organisation

The argan sector has undergone an evolution marked by organizational aspects and support to producers. Since the first women's cooperative of production and marketing, in 1995 there has been the creation of the first group of women cooperatives producing Argan (UCFA) in 1999. The recognition of the argan tree forest as Biosphere (RBA) also revitalized the cooperative sector with almost 300 cooperatives today.

With the aim of supporting the structuring of the professionals in the sector, a new stage was marked by the installation of a geographical protected indication "IGP Argane" within the framework of a new law on the Characteristics of Origin and Quality (SDOQ). In order to consolidate the professional organization of the sector a Moroccan Interprofessional Federation of Argan (FIMARGANE) was created in 2011. It represents a new structure for strategic consultation and management which includes major components of the argane value-chain. It includes the National Federation of Natural Forest Users, which counts 7 provincial associations representing fruit producers.



## C.2. Project / Programme Objective against Baseline

*Describe the baseline scenario (i.e. emissions baseline, climate vulnerability baseline, key barriers, challenges and/or policies) and the outcomes and the impact that the project/programme will aim to achieve in improving the baseline scenario.*

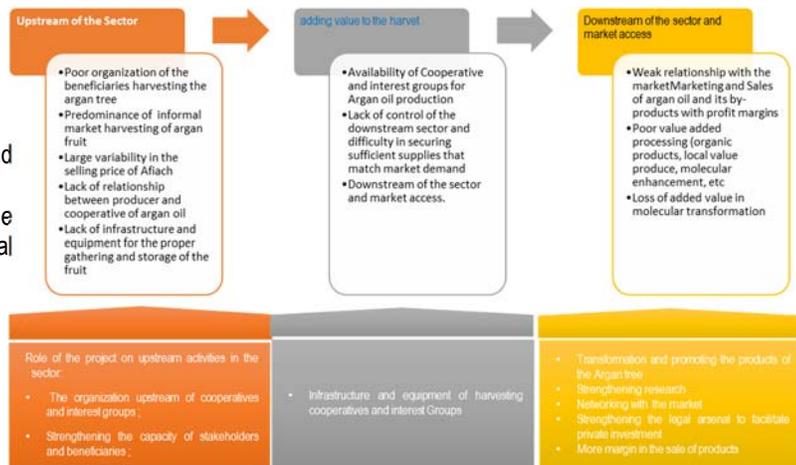
The first challenging achievement of this project is to launch a first phase of the NAMA-Arganiculture program through: argane tree domestication and orchards planting and implementation of innovative and well-designed professional organizations, and supporting measures and capacity building approaches in order to improve ecosystem and communities' resilience.

The second challenge is to contribute to mitigate climate change effects while improving natural resource preservation of the RBA and its sustainability.

The third challenge is the promotion of Arganiculture as both a profitable industry but also as a solution to mitigating climate change. The logical framework shows how project activities can mitigate the impact of climate change in the region while reducing local risks as well as provides the means to deal with the carbon sequestration problem.

The project seeks to improve the organization of the upstream and downstream sectors through the adoption of a value chain approach of the argan tree and therefore fits nicely within the logical framework of the Green Morocco Plan. The project addresses the following:

- Complementarity in dynamic development: the project will strengthen the initiatives for the promotion of the sector by namely strengthening the upstream and downstream activities.
- Capitalizing on the achievements and sustainable development initiatives in the region: the logical framework of the project capitalizes on advances in the Green Morocco Plan, including investments in the organization of the sector and improving the performance of Argan oil cooperatives and linking them effectively with growing global markets.



**EMISSIONS BASELINE**

Project objective is to implement modern argan tree orchards (arganiculture) on 10,000 hectares and build innovative institutional and a performing professional organizational environment. This will support the decrease of anthropic pressure on the natural forest which is one of the key carbon sequestration sources. The Project will allow carbon sequestration of -604 223,30 T.eq.CO2 toward 2030 as compared to a 'without project' scenario (-80 234,65 T.eq.CO2), broken down as follows:

**CLIMATE VULNERABILITY**

Most of the argan tree in the natural forest grows on shallow, rocky and poor soils. The vegetation land cover in the argan forest decreases because of wind and water erosion, particularly in watersheds. Somme studies' estimate of soil erosion rates in the Souss-Massa reached critical levels of 400MT/km2/year with a peak of 600MT/km2/year in the Abdelmoumen watersheds. The severe climate prevailing conditions, coupled to a mountainous and hilly topography, are causes of significant erosion and concern. This situation is aggravated by the slow rate of soil recovery due to the use of inappropriate farming methods and continual overgrazing.

The climate in Southwestern Morocco is highly arid with annual rainfall trends showing significant variations with very dry seasons and rainfall below 100 mm. The alternation of long dry periods and short rainy periods is one of the characteristics of the climate of the region with long dry periods contributing to degradation of the vulnerable ecosystems. The biodiversity of this region is composed of many endemic plant species associated with the argane wild forest. These plants have many different uses ranging from food, aromatic, medicinal, nutritional...etc.

**CHALLENGES AND/OR POLICIES**

The actual natural argan forest is ruled by a specific forestry law. It is managed under a complex tenure system in which the trees are state property but user rights include fruit harvesting are granted to resident communities and regulated by traditional practices that vary from private ownership to open access. However, the local population is abandoning these traditional usage rights as a result of the "argane oil boom" and socio-economic mutations. Recent studies show that the argane forest is losing its density and decreasing area due to climate change and unsustainable practices.

Local communities have developed important knowledge and skills related to forest use and conservation. This knowledge coupled with scientific research results will be of great use to support managing arganiculture farms. To ensure that individual knowledge is developed and shared, the project includes several actions for managing and sharing knowledge.

It is primordial to highlight that the Arganiculture, a main component of the Green Morocco Plan (GMP), aims to support government efforts to relieve the pressure on natural argane forest, improve the living conditions of populations by increasing their incomes, and increase the resilience through diversification of activities which are less reliant on argane forest areas and scarce water resources.

#### UPSTREAM AND DOWNSTREAM ORGANIZATIONAL BARRIER OF VALUE CHAIN

**Baseline :** The current organization of the collection of afiyach represents a structural organizational barrier to the protection and development argan tree. Indeed, the study by ANDZOA on promoting the sector of Arganiculture revealed that the lack of a well-organized upstream sector is evidenced by a shortage of harvesting and gathering cooperatives and interest groups.)

**With the project:**

The arganiculture sector will contribute to better organized upstream of the value-chain through improved fruit collection and storage to meet market demand with best quality. The development of cooperatives will help strengthen and complete the organizational mesh throughout the industry value chain.

Without this project, 90% of the forest production will be channeled through the formal distribution network and with this project, we estimate the overall production levels to be multiplied by 4 annually, adequately meeting international demand and contributing positively to the livelihood of the beneficiaries.

**Downstream organizational barrier:**

Current estimated annual turnover is a meager 50 million US dollars only as in exports. Without intervention, this revenue will unavoidably deteriorate due to the pressure on the forest and the consequential annual losses to production and the biosphere.

#### FINANCIAL BARRIERS

**Baseline:**

A 5,000-hectare plantation project contract for arganiculture was started in 2013. To date, only 600 hectares have been planned and 25 ha achieved due to lack of funds for implementation. In addition, investment dedicated to arganiculture remains very modest compared with the actual request. To date 3,000 hectares have been identified and formal requests have been made since 2014.

**With the project:**

Planting 10,000 hectares of argane trees will generate an additional added value of more than 375 million Moroccan Dirhams annually.

### **C.3. Project / Programme Description**

*Describe the main activities and the planned measures of the project/programme according to each of its components.*

*Provide information on how the activities are linked to objectives, outputs and outcomes that the project/programme intends to achieve. The objectives, outputs and outcomes should be consistent with the information reported in the logic framework in section H.*

The goal of this project is to support rural communities of the RBA in building resilience and climate change adaptation capabilities.

Project objective is to implement argane tree modern orchards (Arganiculture) on 10,000 hectares and build innovative institutional and organizational environment. The project will contribute to improve soil conservation and fertility and to increase carbon storage in soil and biomass. It will directly improve the livelihood of local population, and especially women. This will support the decrease of anthropic pressure on the natural forest while improving argane fruit production and then help combating desertification. Some of the argan orchards will be implemented on converted private land from conventional agriculture. This program will also adopt water efficient technologies coupled with solar pumping system.

The project will develop a set of coherent and integrated actions for preserving the Argane ecosystems in the context of climate change in the selected zones.

A major shift will be at beneficiaries level perception of argane fruit as a collected product from natural forest to an "agricultural commodity" produced in planted orchards. This will improve fruit productivity and support the major shift of argane oil from local and household use to commercial use.

Sustainable management of natural resources in general and of argan ecosystems in particular must rely on an integrated strategy for managing land, water, and biological resources, which considers the local population as an essential component of these ecosystems.

ANDZOA as the executing entity is responsible for the execution of this program has the capabilities needed to develop the necessary synergies and mobilize all stakeholders in order to achieve the objectives and implement the results. ANDZOA is represented in provincial territories by Departments that will ensure the execution and monitoring of planned activities.

The project focus is the development and promotion of a new farming system "arganiculture" that will contribute to the increase of argan tree productivity. For more many products are generated from argan tree in addition to oil. When considering also fodder production or other crops and animal products, the economic profitability will be important and easy to prove. We should also consider all the other benefits related to environmental protection, social empowerment, biodiversity preservation...etc.

In order to accomplish these objectives, five main activities are proposed for each component as developed below.

### **COMPONENT 1: IMPLEMENTATION OF THE ARGANICULTURE ON 10 000 HA**

This component involves the planting of 10,000 ha, preceded by a pilot project on 500 ha during the first years. The component also provides an extension on 2000 ha, of aromatic herbs and medicinal (PAM) as well as the supervision, the technical assistance of the work and training and training and mentoring of the rights holders and beneficiaries. The first component of the project aims three results:

- Result 1.1: Arganiculture on 10,000 ha implemented;
- Result 1.2: intercropping Argan/ Medicinal and aromatic plants promoted and practiced;
- Result 1.3: Rainwater harvesting strengthened
- Result 1.4: technical support provided and skills and knowledge of beneficiaries strengthened and developed.

#### **RESULT 1.1: ARGANICULTURE ON 10,000 HA IMPLEMENTED**

##### *Activity 1.1.1: Plantation of argan trees on 10,000 ha:*

This activity is the domestication of argan trees on private land, through the following operations:

- o Planting selected argane seedlings at a density equivalent to that in semi-intensive orchard (180- 200 plants / ha) and intensive (300- 400 plants / ha).
- o Use of modern orchard management horticultural techniques;

The overall program of 10,000 ha is implemented in 31 rural communes of the 8 targeted provinces.

The first leading pilot experience is conducted currently under Pilier II of the GMP in the Province of Tiznit with support from the Agriculture Provincial Directorate of Tiznit in a partnership with Association Iklaln in Rasmouka rural commune; a 600 ha project has been identified and a first phase of 25 ha is already established.

#### **RESULT 1.2: INTERCROPPED SEEDLING PROMOTED AND PRACTICED**

##### *Activity 1.2.1: Intercropping with medical and aromatic plants on 2000 ha*

The project targets to promote an intercropping farming system based on planting argane trees with aromatic and medicinal plants (PAM). Generally, the PAM farming is widespread in Morocco with a large and diversified species (Basil, Thyme, Fennel, Mint, Verbena, Saffron, Fenugreek, etc ..). This operation should allow especially ensure:

- *Complementarity between the 'cultivated' and the 'spontaneous' particularly with regard to regularity of product offering.*
- *Product quality (traceability);*
- *the balance between supply and demand for PAM;*
- *the valuation of the land in the targeted areas;*
- *the preservation and protection of certain endangered plant species.*

In the case of the Project, in addition the abovementioned elements the main objective is to ensure to the farmers / beneficiaries additional income while waiting for fruit production of the argane trees and have access to additional income.

Its worth mentioning that tests of Medicinal and Aromatic plants were conducted under a project by MAPM in the region Souss Massa (Project ASIMA) and the results are already available.

The first year of the project will cover an area of 100 ha in rural pilot site. Pilot plots will be developed to test the species that bests fit the area.

Capitalizing on existing results, it is proposed to test three species of PAM by province (thyme, fennel and mint / lemon verbena). The final choice of species to plant will be at the end of the first year. These will be tested PAM planted in dividing strips beside the argan tree to encourage the development of an ecosystem in the area.

In light of the results of the pilot sites, there are plans to extend the culture of PAM over an area of 1,500 ha. According to the local surveys and meetings with local stakeholders, the PAM sector is booming. This could bring significant added value to contribute to the improvement of living standards of the vulnerable populations.

It should be noted that the PAM sector is organized and structured in such a way that the “production of biomass” (collection) and “transformation” and is characterized by the diversity of stakeholders and operators along the value (extraction, drying, distillation, packaging, cold storage, herbalism, pharmaceutical, extraction, preparation, etc.)

#### **RESULT 1.3: IMPROVING RAINWATER HARVESTING AND CONSERVATION OF WATER AND SOIL**

The climate in Morocco is arid or semi-arid character and is marked by recurrent droughts; its rainfall regime is very irregular in time and space with a sequential alternating years of high runoff and then severe drought, which can last several years.

The current PDAIRE of the Project area revealed that the groundwater resources are in deficit; the only potential water resources available are surface water in medium, small dams and rainwater harvesting infrastructure. Other less known and uncertain resources, such as artificial insemination of clouds, and the exploration of deep groundwater. In the non-conventional water component, the identified options are the use of desalination of sea water and reuse of treated wastewater.

Capture and storage of runoff water and its harvesting for domestic, agriculture and environmental management. The capture techniques and rainwater harvesting could be a promising source given their wide area distribution covers remote areas with difficulty to reach and supply, particularly in the mountainous rural areas. Many technologies have been developed within this framework; collection in rainwater is used for irrigation (as supplemental irrigation) and for pastoral water points along the rangelands and in the municipalities engaged in farming (collective tanks on course the Ghdirs, hill lakes, etc ...) The studies undertaken by the ABH-MS has identified a significant need for rainwater harvesting. It needs amounts to over 1 billion MAD over 3 years (2017-2019). Assuming the integration of activities of the First Draft and after the various meetings and consultation with the various stakeholders, a preliminary program has been identified and recommends the construction of 95 macro and micro ground catchment systems for rainwater harvesting with an average storage capacity of 600 m<sup>3</sup> each. The average unit cost per system of 65 thousand US \$. The overall amount s' amounted as mentioned on financing program with funding from 5% to be provided by the ABH.

#### **RESULT 1.4: PLANTATION ACCOMPANIED**

##### *Activity 1.4.1: Supervision, technical assistance work*

This assistance concerns the monitoring of the work and the finalization of site selection and planning for the duration of the project among the identified potential.

The choice of priority areas will be done through a participatory approach with beneficiaries and based the date of submission request for funding par stakeholders. Also, the implementation will be based on the follow criteria that includes:

- General geographical zoning
- Specific criteria of the perimeter:
- Commitments and responsibilities of beneficiaries
- Adaptability to the argan plantations
- Balance between the potential areas identified

#### **COMPONENT 2: STRUCTURATION ON UPSTREAM AND DOWNSTREAM ARGAN VALUE CHAIN**

This component will lead to two results that are:

- Result 2.1: Professional organizations on the upstream of the sector of Argan structured and GIE created and accompanied
- Result 2.2: Valuing of argan products

#### **RESULT 2.1: PROFESSIONAL ORGANIZATIONS ON THE UPSTREAM OF THE ARGAN SECTOR STRUCTURED AND GIE CREATED AND ACCOMPANIED**

The different evaluations of the current state of the argan space raise the weakness or absence (in the majority of the ecosystem) of economically viable professional organization of fruit producers. The aforementioned evaluations also raise the insufficiency amongst active economic actors in the aspect of marketing of argan nuts as regard to the recorded potential of production.

In fact, the segment of agro industrial and cosmetics companies monopolizes most of the added value generated by the sector of the argan when that of fruit producers has remained on the sidelines of this dynamic sector and its recorded development.

Concerned with this situation, the study initiated by the ANDZOA confirmed the need to structure territorially geographical area of the argan in homogeneous production areas as the social and technical plan is in concern. Aforementioned study suggested setting up models of organization of fruit producers to create perimeter including their federation into GIEs (interest groups), while ensuring the technical, financial and economic viability of these new institutions.

It is accordingly that is registered the outputs of this result 2.1 which aims at the structuring of the actors especially those operating in the upstream of the sector of argan this through the accompaniment of the professional organization of the fruit producers.

These second-order organizations allowing both to operate at the level of argan and also to position themselves for the new perimeters of organiculture planned as part of the project in question (see component 1).

The support expected under this project to cooperatives and GIE organizing the upstream sector of the argan, besides financial support, will focus on technical assistance, knowledge improvement (statistics and socio-economic) concerning the sector, the professional organization and the preservation of the environment.

*Activity 2.1.1: mobilization and supervision of the entitled persons and farmers and their professional organization (OP).*

The mobilization and the framing of the fruit producers constitutes the key to the success of the project. Indeed, it is themselves which are organized to constitute their OP and themselves which influence its performance.

The mobilization in question will pass by their sensitizing and their information on all opportunities offered currently to make a success of their project, and especially, to integrate the sector of the argane in order to develop the production.

A set of messages must be transmitted, inter alia:

- The imperative to transform their organization into a viable OP (autonomous and efficient) able to mobilize the fruit producers for collective management to guarantying subsequently a consistent quality product on the level of identified perimeter;
- The importance of the organizations of second order for valorization and/or marketing. Other messages can be added according to regional specificities and specificities of the perimeters.

The project teams will define a communication and animation plan in light of the results of social diagnosis (D.S.). Simple communication media, and depending on the target groups, must accompany the awareness sessions.

- *Awareness and information of farmers and their OP in the Arganeraie.*

This is a vast operation to launch across the whole geographical area of the argan in the shortest possible time in order to raise the fruit producers' awareness on the vital role their professional organizations can play; the latter will, indeed, likely secure over the long term, the benefits they receive in the exploitation of the argan and enable them to derive substantial profits that can improve their income and living conditions.

- *Training and support to farmers and their OP*

This proposed training for farmers and fruit producers and their OP aims to make these organizations more dynamic and to equip them with management tools that allow the operation exploitation respecting all governing and regulatory requirements. They must be: I) informed on their project and the context characterizing it, II) aware of the value of their cooperative and how to manage it daily III) informed on the interest of a collective management system and the basic guidelines of this process

In addition to training, the farmers and their organizations will be informed, trained and mentored on the possibilities of adjustments and conversion of associations into cooperatives to prepare the creation of cooperative unions, or to integrate the GIEs (interest groups) that will be created and processed in activity 2.1.2. These organizations of second order will be the adequate models to deal with, later, the activities of valuing and marketing of the argan biosphere products.

This approach will thus ensure first, improving productivity and secondly, prepare for the development of products and marketing. The farmers and fruit producers and their organizations will be initiated to promote partnerships between the various actors operating in the sector.

*Activity 2.1.2: Support cooperatives and GIE creation*

The projected organization comprises two levels:

- The creation of cooperatives to the upstream of the sector of the argan whose main object is the collection of the harvest of the fruits of argane within the limits of a zone identified within a perimeter of production;
- The federation of the cooperatives in GIEs (interest groups) which give them supports in the conditioning of the product and their operation (organization, financing, administrative approaches, etc) and deal with the management of marketing.

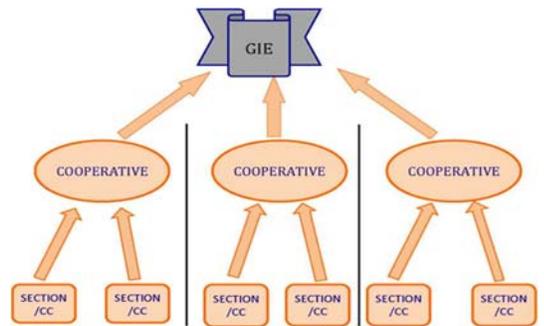
*Methodology for determining the number of cooperatives and GIE* : The determination of the number of cooperatives and GIE to be created in the zones of action of the perimeters of production is based on criteria of viability of these institutions as well as human and space homogeneity and finally of efficiency of the interventions.

Number of Cooperatives: Affiliates and members of cooperatives will be necessarily the fruit producers of the argan.

To determine the number of cooperatives to create, it was taken into account criteria of viability based on the surface of the perimeter and the volume of its production. The followed approach consisted of:

- Fixing a level of production ensuring sustainable viability fruit collection to an argan cooperative; this level is set around 6,000 tons of dried fruit / year (one ton of fresh fruit provides 0.6 tons of dried fruit);
- Beyond this level, the calculation of quotients surface/production will allow to take into account the importance of the surface and its space distribution; the more important the surface is, the more heterogeneity on the level as of human groupings is large, which implies the creation of more cooperatives.

Number of de GIE : With the objective to strengthen the homogeneity and increase the cohesion and effectiveness in terms of mastery of the marketing of raw materials and knowing that it will require a minimum of two (2) cooperatives to form a GIE, the number of GIEs retained is 11 centered on the following production areas: Smimou, Tamanar, Tamri, Agadir, OuledBerhil-Taliouine, Taroudant - Argana, Ouled Taima - Ighrem, Ait Baha, Anezi, Ifni and Tiznit.



technical package: The main mission of the GIE is to take address of the fruit market issues for its members with a specific focus on quality and certification concerns. In the long term GIEs may develop argane oil extraction and marketing.

It is noteworthy that the model of the GIE that was used in developing the business plan is a pilot model representing a minimum production capacity considered, of 9000 tons of dried fruit, given that this model is destined to be resized according to the production areas, the volumes of harvest of argane fruit and the subjective criteria of fruit producers interest groups.

The pilot diagram selected as bases for the study is composed of a GIE of fruit gathering, initially, composed of three cooperatives of fruit producers. The number of cooperatives members may experience an evolution linked to the organization of the fruit producers. In other words, the GIE can integrate any new cooperative created in its area of activity.

In the short term, the main mission of GIE, is collecting the production of Argan dried fruits, proceedings it fully or partially, depending on market demand, to transformations, including pulping, packing and crushing, and selling the product to operators of argan oils manufacturing or export sector.

In the medium term (after about five years of existence), GIE can expand its activities to the production of argan oil and possibly include other economic operators in the context of a community development at the level of its entire action area. Such a development will not be carried out unilaterally but in cooperation. They are expected to play a participatory and dynamic role in improving the economic and social situation of the aforesaid project area and thus at all the levels of argan supply chain.

For each of the identified production areas, it was retained to implement a maximum of one GIE and that, pursuant to well-defined criteria, namely:

- To have a critical argan fruits production with a certain economic interest for the fruit producers ;
- Gather fruit producers groupings which can create cooperatives that will be integrated into the GIE;
- Fit into existing administrative limits.

Within each cooperative member of the GIE, shall be created transformation farming centers which will act as collection centers of argan fruit. The aforementioned centers are members of the cooperative, and their presidents will sit on its board of directors and its general meetings.

The number of centers, their areas of action and their functioning are defined by the board of directors of the cooperative. The main activities of these centers are::

- To collect the production of the fruits of argan from the fruit producers ; the conditions, standards and purchase prices are fixed by the GIE and shared with the cooperatives;
- Inform fruit producers about the activities and results of the cooperative.

It is to be announced that all the process of collection, transformation and marketing will be carried out by applying the standards of traceability required for certification of the finished products. These standards will have to be applied as of the first operations of collection. The architecture of the organization of the fruit producers in cooperatives and GIE is described by the following diagram:

The technical assistance provided in the project will work according to this scheme. The aim is to set up, like what has been committed in the framework of the Green Morocco Plan for the two sectors of the Olive and Date palm, the GIE organizational model, which aims to establish a self-aggregation mechanism of solidarity development projects, viable and sustainable economically, with a corporate vision for projects able to integrate and even compete in the market.

This support will concern women and young people to interest them and integrate them into the links of the value chain of the sector. The aforementioned support will also address:

- The implementation of a full and participatory approach for the professional organization of all farmers into cooperatives so that they can integrate the newly formed GIE.

- The training and the mentoring of the GIE and the adherent cooperatives in areas of management, marketing, communication, accounting and access to financial services. To do this, information sessions and training and demonstration tours inside and outside the country will be organized for the benefit of selected cooperatives and or GIEs (interest groups);
- The training of the collection centers in the best practices with regards to storage, conditioning, packing and adoption of adequate practices and suitable value add processes..
- The organization of work and the implementation and training of quality and its best global practices and standards, , throughout the production process and value added steps.;
- The necessary training in developing opportunities and the marketing of the GIEs' products.
- The design, development and field roll out , in a participative manner, of a framework for dialog and coordination of the GIEs and professional organizations of the argan sector;

#### RESULT 2.2: ARGAN'S PRODUCTS ARE VALUED

The main target in the short term for the interest groups created as a result of 2.1, is collecting the production of dried Argan fruits, processing it fully or partially , depending on market demand, including pulping , packing and crushing, and selling the product to argan oil processing cooperatives or companies.

In the medium term (after about five years of existence), these interest groups can expand into the production of argan oil and possibly include other economic operators in the context of a community development effort covering its territory. Such a development will involve the beneficiaries acting together as one team. They are expected to play a participatory and dynamic role in improving the economic and social situation in their area and eventually for the overall Argan biosphere.

##### *Activity 2.2.1: Implementation of argan product collection units*

The project will support the development of 11 centers for collecting and storing the Argan fruit. The unit size chosen as a base model, is an interest group consisting of three (3) cooperatives. The overall collection and storage capacity totals 9,000 tons of dried Argan fruit, with an average of 3,000 tons per cooperative. A varying proportion of these quantities is transformed to be sold as kernels and the rest is sold as is.

##### *Activity 2.2.2 : Installation of argan oil extraction pilot unit*

In order to reduce the pressure on the natural resources of the biosphere, it is imperative to diversify the activities and to increase the incomes of the local populations and to keep most of added value from these producing activities in at the community level.

In this perspective, it is important to support the development of argan oil products and its other byproducts through new trade and professional organizations in the form of new operating cooperatives and GIEs.

To implement this approach, the project will support the establishment of pilot Argan oil extraction mills. These units work with quality standards that meet the requirements of the national and international market by ensuring maximization of the added value in the country and best product quality. All tender specifications are indicated in the Argan Oil IGP. In light of the results of these pilot projects, tools and methods will be recommended to generalize best practices for the extraction process. The investment costs for this activity are shown in the financial summary. The funding contributions by the beneficiaries will reach up to 10 % in the form of land.(cost of land acquisition).

#### COMPONENT 3: CAPACITY BUILDING, KNOWLEDGE MANAGEMENT, CO-MANAGEMENT OF NATURAL ARGAN FOREST AND SCIENTIFIC RESEARCH PROMOTION

Three results are sought through the third component of the project. These results are :

- Result 3.1: Climate change management Capacities of institutional actor, elected representatives and professional organizations are reinforced and developed (RBA Co-management).
- Result 3.2. Consolidating and promoting research on the Argan Tree. is consolidated and encouraged.

#### RESULT 3.1: REINFORCED AND DEVELOPING THE CAPACITIES OF INSTITUTIONAL ACTOR, ELECTED OFFICIALS AND PROFESSIONAL ORGANIZATIONS IN THE FIELD OF CHANGE CLIMATE MANAGEMENT AND CONTRIBUTE ON CO-MANAGEMENT OF ARGAN NATURAL FOREST

Through this subcomponent, the project stakeholders (managers, partners and beneficiaries) can enhance their design capabilities and project implementation and adaptation to climate change. Meetings and contacts made at the time of the surveys, have identified the main gaps. On one hand, strengthening the participants' knowledge on adaptation methods to climate change and their relationship to the Biosphere Reserve of the Argan tree (RBA). On the other hand,, building skills in financial partnership management and conflict management In the field of adaptation to

climate change / RBA. Capacity building needs vary between the stakeholders: the beneficiaries find their livelihood directly impacted whereas the role of the public officials requires them to manage and anticipate the effects of CC / RBA on these impacted populations.

- *Activity 3.1.1: Training of institutional actors and elected officials on the challenges of climate change to integrated local planning in the RBA and training on co-management of Argan Natural Forest*

In areas of the Argan tree, information / training of actors for CC / RBA and CC adaptation is uneven. The project will address the information and training gaps in selected sites that have not had the opportunity to benefit from major training or knowledge transfer activities on adaptation to CC.

Populations have acquired expertise and adaptation techniques to CC because of their ancestral management experience in facing scarcity and natural hazards. The consultation workshops confirmed that there is an awareness of aggravated risks posed by climate change in all locations and areas affected by the project components. The said project aims to undertake the following actions:

- *Development and implementation of a training program on climate change in RBA.*

The project will issue a call for expressions of interest (EOI) with training organizations to develop a skills development plan and implement it with all required participants. Overall, these modules must cover most sectors affected by climate change related to the Argan tree. These modules should also address aspects of climate finance, conflict management and mediation, biodiversity conservation, green economy, etc.

All selected modules are in line with the Green Climate Fund strategy:

- *Participation in events and scientific meetings and forums:* This action intends to support, according to an annual program prepared by the Project Unit, the costs of participation of technical officials at scientific meetings for climate change and local stakeholders awareness forums organized around the topics related to the argan tree and its preservation and development.
- *Organization of travel and Training:* The project will support the logistics and costs and plan for continuous training and knowledge transfer of the project actors on topics of innovation and adaptation to climate change.
- *Training of Co-management on Argane Natural Forest :*

The purpose of this activity is to initiate a public debate on the integration of climate change and biosphere reserves in regional planning through the initiation of the process of developing a project charter / memorandum on RBA climate change in the light of the new strategy 2016-2025 MAB (Lima 2016)

- *Activity 3.1.2 : Co-management of Natural Argan Forest*

Many sub-activities will be implemented to reinforce management capacity and develop a mitigation approach to climate change, namely

- *Capacity building:* Meetings held with local officials and representatives of the beneficiaries, to share the need to address key gaps in knowledge transfer and sharing:
  - Reinforcement of technical knowledge of beneficiaries and fruit producers.
  - Skills with regards to collective management of the perimeters and the operation of their OP
- *Reinforcement of capabilities and technical knowledge of beneficiaries and fruit producers :* The argan development model requires capacity building in the following areas:
  - the plantation and culture of selected argan varieties according to a model of semi intensive orchard seedlings;
  - Agronomic Training techniques, methods, and best practices ;
  - Intercropping of herbal and medicinal plants and sustainable farming training.
- *Capacity building for collective management perimeters and the functioning of their OP :* Among the expected outfalls of the new plantations of 10 000 ha of argan, as planned and part of this program is to develop the organizations developing the project (generally an association, for each new websites / area) to create second tier professional organizations (cooperatives and GIEs) mobilizing farmers / beneficiaries and grouping them around a plan of action as regard to the management of their perimeter.

The second goal that DARED will reach is develop a co-management of natural argan forest and contribute to its protection and regeneration by implementation by :

- *Development of co-management agreements and sustainable use of natural forest and its regeneration*
- *Implementation of co-management agreements between stakeholders and actors*

After completing these critical steps in the project, the integration of the OP will be strengthened throughout the different levels in the argan value chain. This intervention will also reinforce marketing and value adding practices.

A comprehensive social diagnostic will be performed at the level of each identified perimeter to identify the existing organization types and ensure their representativeness; ii) examine the functionality of the organizations dedicated to the project; iii) to verify the information received by farmers for perimeter management; iv) master the specific constraints and social aspects of each perimeter. The results of this survey will be used to better frame the activities of capacities building of farmers and their OPA. This activity will contribute to

- Development of training modules for development and collective management of cooperatives and GIEs;

- Organization of informational workshops for collective management;
  - Support for improving the governance of Arganiculture projects: i) preparation of action plans ii) development of performance management capacities of OP iii) organization and performance monitoring
- Development of co-management agreements of sustainable use of Argane natural forest
- Implementation of co-management agreements between beneficiaries and actors on Argan Natural forest

The same support will be engaged in component 2 but for the Afyach harvesting cooperatives. It is imperative to coordinate these actions in terms of content and messages development to be conveyed in order to have real impact and results;

**RESULT 3.2: ARGAN RESEARCH IS CONSOLIDATED AND ENCOURAGED**

*Activity 3.2.1: Support for the implementation of the Argan National Center (CNA)*

The establishment of the national center of excellence of the argan tree will channel the efforts of all scientific and professional actors. This center will also promote Argan's cultural heritage and support for research excellence. Its strategic objectives will address:

- Preserve and interpret natural and cultural heritage of the RBA linked to the argane tree through the creation of the "Argane interpretive Center"
- Design and implementation of a knowledge management platform on the Arganeraie and argane tree
- Support scientific research on RBA and argan tree by supporting the implementation of joint programs and fund raising and fund management mechanisms;
- Technological intelligence and expertise to support decision-makers and professionals, and all the stakeholders towards sustainable development.

The project will contribute to the launch of this center by supporting the development of its content and strengthening the capacities of its key actors. The first support axis are:

- Acquisition of specific equipment and staffing of the Argan Promotional center. The center is for the promotion of tangible and intangible heritage related to the Argan tree and its valuation in support of the local populations directly creating value in the Argan supply chain..
- Implementation of a knowledge management portal for the argan product and the argan tree. A tool that will be useful to facilitate access to knowledge for fruit producers.
- Creation of a knowledge sharing portal on the argane tree and its market

*Activity 3.2.2: Support for the concretization of the Argan Research-Innovation Federator Program*

The project will support the realization of the "Joint Argane Research Program" mainly through:

- Call for research proposals mainly about the development of arganiculture
- Support scholarships for young researchers to fund research topics on the Argane / CC / RBA priority issues ;
- Support for the National Argane Researchers Network (RENARGANE);

**C.4. Background Information on Project / Programme Sponsor (Executing Entity)**

*Describe the quality of the management team, overall strategy and financial profile of the Sponsor (Executing Entity) and how it will support the project/programme in terms of equity investment, management, operations, production and marketing.*

The National Agency for the Development of Oases and Argan tree Zones (ANDZOA) is the executing Entity. It's a public Agency and part of Ministry of Agriculture and Fisheries created in 2010.

ANDZOA's missions are to develop, in coordination with government authorities, elected deputies and concerned stakeholders, global development and preservation programs of Oases and Argan biospheres and to ensure their implementation, monitoring and evaluation.

The oasis and Argan tree zones territory is vast and represents nearly 40% of the national territory. This territory has 5 administrative regions and 16 provinces and 388 communes. For areas of the argan tree, ANDZOA aims to:

- Ensure the preservation of Argan tree forest, its protection and development including the implementation of socio-economic projects;
- Conduct Argan forest extension operations in accordance with the national forestry laws and regulations
- Conduct or supervise the implementation of Argan tree product valuation projects , marketing, promotion and labeling, especially under contracts or agreements- program agreed to with the Agency;
- Structure Argan tree chains production and marketing in partnership with different stakeholders including the concerned populations;

- Encourage scientific research of the Argan tree, its protection, development and valuation of its products.

Similar to ADA, the ANDZOA is subject to environmental, social and gender laws, policies and regulatory procedures. ANDZOA has the same statutes as the ADA in terms of governance and financial and budgetary management.

- Governance and management

In terms of governance, including the management of the project, the ANDZOA is administered by a board of administration chaired by the Head of Government with seats or all departments.

In addition, the ANDZOA is oriented by a Strategic Steering Committee chaired by the Minister of Agriculture and seat or sectorial Departments and Presidents of Regions within the zone of the invention of ANDZOA.

- Audit, management and budgetary and financial control

Concerning its overall management, budgetary and financial control, ANDZOA, like the ADA, is subject to the same procedure on expenditure controls. The ANDZOA conducts external audits and is subject to the audit of the General Inspectorate of Finance.

- Management Project's capabilities

ANDZOA is managing many development Projects related to climate change: adaptation, mitigation, biodiversity, and preservation. The following table summarizes the most important structuring projects implemented by ANDZOA :

<i>Project</i>	<i>Coût en million US\$</i>	<i>Nature</i>	<i>Partenaire financier</i>
<i>Project of climat change adaptation in oases zones (PACCZO)</i>	<i>10</i>	<i>Grant</i>	<i>Adaptation Fund</i>
<i>Project of Economical Interest Group support (PAGIE)</i>	<i>16.5</i>	<i>Grant</i>	<i>Belgium Cooperation</i>
<i>Développement et valorisation de la biodiversité du Lac Naturel d'Iriqui – Région de Tata et Zagora.</i>	<i>12.2</i>	<i>Grant</i>	<i>German Cooperation</i>

In addition to that, ANDZOA manages, through its annual budget, an average of 27 million USD (two last years). The partnership and contractualization are the guiding principles of the Development Strategy of ANDZOA.

During the period 2012 -2016, 503 partnership agreements were signed with local elected councils and NGOs for a global funding budget of more than 846 million MAD, with 302,5 million dirhams from ANDZOA's own budget (40% from the total budget request) (fig 5).

ANDZOA is currently implementing :

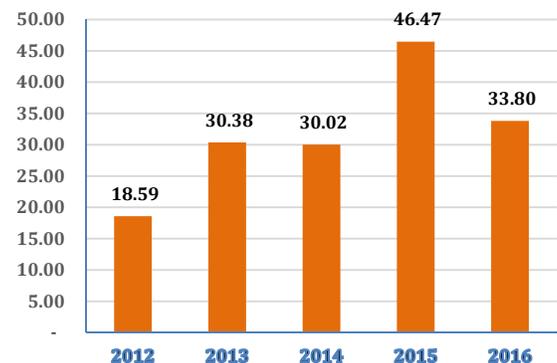
- the Arganiculture orchards in the RASMOKA site. This project is conducting on 600 hectares and is implementing and managing by ANDZOA's Staff in coordination with the stakeholders and Provincial Agricultural directorate,
- the Adaptation project to climate change in oases area (PACCZO) and its implementation in line with the safeguards policies of the Adaptation fund and national law.

In additional ANDZOA will be:

- Accountable to ADA for project execution and for the effective and efficient use of resources.
- Responsible for project supervision to ensure consistency with GCF and ADA policies and procedures.

Add to ANDZOA, ADA's role is important and Many projects managed and supervised by ADA. The budget of projects funded by donors and who are registered in the ADA's budget amounts to US \$ 180.5 million for the period 2011- 2018 (13% grants and 87% loans). Is about about \$ 30 million annually managed by the ADA budget. Other budget not included in the ADA's budget amounts to 164.5 US \$ Million for the period 2010-2018 (81% grants and 19% in loans).

fig 5. Evolution de la contribution ANDZOA aux projets de développement dans la zone Arganier 2012-16 (en Mdh)



**C.5. Market Overview (if applicable)**

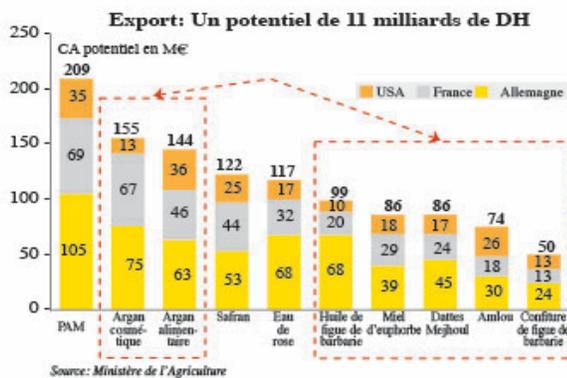
Describe the market for the product(s) or services including the historical data and forecasts.

The Global argan oil market was 4,835.5 tons in 2014 and is expected to reach 19,622.5 tons by 2022, growing at a CAGR of 19.6% from 2015 to 2022.<sup>8</sup> The market overview is worldwide including Europe (France, Germany, Italy and Switzerland), USA and Canada for the American countries and Japan, Russia and China. In 2010, the main global argan oil market was Europe (especially France).

According to statistics of the Autonomous Establishment of Control and Coordination of Exports (EACCE), Argan oil exports continue to increase, reaching 1000 MT in 2014-2015. The first buyer is France with (78%), followed by Germany (7.6%) and Switzerland (7%). The potential market for Argan oil is estimated at MAD 11 billion with exports going mainly for France, Germany and USA.

Argane oil is mainly used for cosmetics is well known and the international market growth is well established. The estimated total oil production is around 4000 MT/year. The amount oil export showed a significant increase since the early nineties to reach almost 1000 MT.

In 2014 (fig2). The international cosmetics' market is continuously growing. The prices are almost stable and are beyond 200 DH/liter. The global argan oil application is Cosmetic, Food and Medical<sup>9</sup>



Given this significant demand, Argan oil production faces barriers for achieving the full export potential such as the deterioration of the natural forest and the limiting effects of climate change.

The following reasons show why the project will help to meet this growing and important demand:

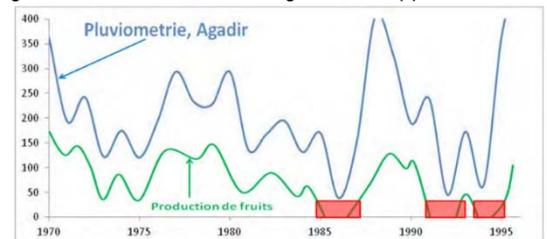
- Production is ranging from 3 to 10 kg per tree, or 240 to 800 kg per hectare,
- The area of productive forests is estimated at 664,000 hectares with a density of 80 trees / ha (80% of the total area of the argan tree, which represents 830,000 hectares) and a production of 320 000 MT / year.

Due to climate variability (mainly rainfall) fruit production of natural argane forest is also variable which makes it difficult to conduct proper marketing and sales planning. The impact of this variability is mainly felt at the end of the chain; in particular to ensure the commitments and contracts with customers in the international market which requires work in the long term.

Total fruit production in the argane forest can vary wildly from year to year because of rainfall fluctuations (fig 6).

The argan boom seems to have improved educational outcomes, especially for girls. However, booming argan prices have not improved the forest and may have even induced degradation. They also show that since the boom began, much of the northern argan forest appears to have thinned.

- Real argan fruit prices in rural markets have roughly quadrupled since 1999, whereas oil prices in these markets have tripled (1).
- The boom has made households vigilant guardians of fruit on their own trees, but has not incited investments in longer term tree and forest health<sup>10</sup>



<sup>8</sup> <http://www.grandviewresearch.com/industry-analysis/argan-oil-market>

<sup>9</sup> <http://www.grandviewresearch.com/industry-analysis/argan-oil-market>

<sup>10</sup> Lybbert T. J., A. Aboudrare, D. Chaloud ; N. Magnan ; M. Nash. 2011. Booming markets for Moroccan argan oil appear to benefit some rural households while threatening the endemic argan forest. Proceeding of the National Academy of science of the United States of America. vol. 108 no. 34.

- Unless locals' short term obsession with fruit collection matures into longer term productivity and sustainability concerns, rural poverty reduction may itself be a short term benefit of the argan boom<sup>11</sup>.
- If the worse case scenario under climate changes occurs, the argan region may become too dry and too hot to continue hosting the argan tree. Vast expanses of argan orchards might then be seen better suited for the tree.

#### Competitive Insights<sup>12</sup>

Key companies involved in distribution services consist of Argan Oils (distributor), The Moroccan Argan Oil Inc. (seller/marketer), Argan Export Company (trader) and Simply Agadir (trader). There is availability of wide range of end-users, and their count is expected to increase owing to the product's widening application base in medical and food industries. Many manufacturing operating in the global argan oil market (OLVEA, Zineglob, Biopur and Nadifi Argan, ...)

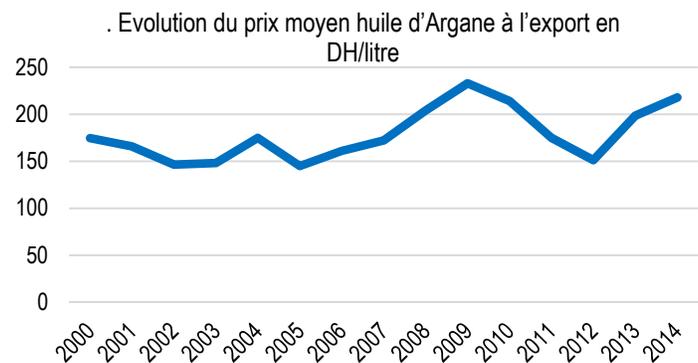
#### *Provide pricing structures, price controls, subsidies available and government involvement (if any).*

Dried fruits (afayach) are usually purchased from users through intermediaries at a price of 1 to 1.50 DH / kg. The product is stored and sold upon demand by production cooperatives of the Argan oil at a price between 3 to 3.50 DH / kg. This price was 2,70DH / Kg in 2013 and its increase is attributed to the decline in output and the pressure of domestic and external demand for oil, especially for cosmetic grade oils.

It should be noted that the purchase price of the raw material does not really reflect the intrinsic value of the product and the workdays spent by users for its gathering and storage. Indeed, middlemen, fix prices unilaterally by making advance payments to harvesting cooperatives once they receive deposits from buyers.

Currently, the price of argan oil is at the following levels: 1) Edible oils: - Bulk: 150 to 200 DH / l - Bottle: 300 DH / l – 2) Cosmetic oils: - Bulk: 200 to 250 DH / l - In small packages: up to 800 DH / l

Prices vary according to supply and demand. The state does not intervene in the pricing of sales of products of Argane. however, the argan tree is a local product which is protected by the law 25-06 on Distinctive Signs of Origin and Quality (SDOQ)<sup>13</sup>



### C.6. Regulation, Taxation and Insurance (if applicable)

*Provide details of government licenses or permits required for implementing and operating the project/programme, the issuing authority, and the date of issue or expected date of issue.*

The implementation of the various project activities do not require any special permission. The project will form part of the implementation of NAMAs Arganiculture and as part of the implementation of the Green Morocco Plan. The only requirements are those relating to environmental protection and the requirements of implementation of activities in the Biosphere Reserve of the argan tree. The Environmental and Social Impact Assessment summarizes the different laws that must be respected including the 12-03 law on environmental acceptability granted by a national commission composed of various ministerial departments.

The project will be implemented with groups of small producers who put together their land and organize themselves to this purpose. It is the model adopted for "Pillar II" projects related to "agriculture solidaire". In general and according to the legislation that governs such partnership scheme a presentation, verification, approval and contracting has already been implemented in the context of several other diversified agricultural value-chains such as olive tree projects, almond tree and milk production. This regulation provides that once a project is approved contracts are signed between the government institution to implement and organize the beneficiaries to ensure project implementation and especially to insure its sustainability.

### C.7. Institutional / Implementation Arrangements

<sup>11</sup> Lybbert T. J., A. Aboudrare., 2011. Win-Lose The argan products valorization seems to benefit rural households while harming the endemic argan forest. in Premier Congrès International sur l'Arganier : Acquis et perspectives de recherche scientifique. Agadir, Maroc, 15-17 Décembre 2011

<sup>12</sup> <http://www.grandviewresearch.com/industry-analysis/argan-oil-market>

<sup>13</sup> [http://www.agriculture.gov.ma/sites/default/files/siam15-produit\\_terroir-vanq.pdf](http://www.agriculture.gov.ma/sites/default/files/siam15-produit_terroir-vanq.pdf)

Please describe in detail the governance structure of the project/programme, including but not limited to the organization structure, roles and responsibilities of the project/programme management unit, steering committee, executing entities and so on, as well as the flow of funds structure. Also describe which of these structures are already in place and which are still pending. For the pending ones, please specify the requirements to establish them.

Describe construction and supervision methodology with key contractual agreements.

Describe operational arrangements with key contractual agreements following the completion of construction. If applicable, provide the credit analysis of key counterparties of key contractual agreements and/or structural mitigants to cover the counterparty risks.

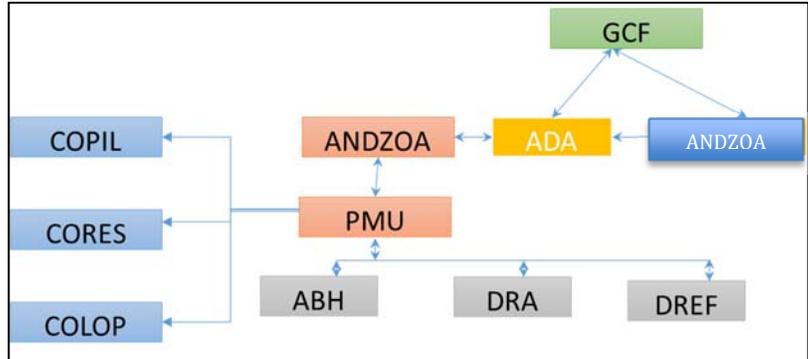
The institutional structure of piloting, monitoring and implementation of the proposed project emanates from previous lessons learned through other important projects. The analyses and discussions held during the preparation of this project resulted in the decision to set up a team that will manage by objectives. The relevant arrangement envisages the following organization:

**Steering Committee (COFIL) Ad hoc committee /**

The Steering Committee (COFIL), chaired by the Secretary General of the Ministry of Agriculture and Marine Fisheries or the ANDZOA General Director gathers all the stakeholders: MAPM central directorates (DIAEA, DSS, DF, DDFP, RFLD), ADA, ANDZOA, the HCEFLD, Water Department, Environment, Tourism, Handicraft and social and solidarity economy, FIMARGANE ...).

The COFIL will meet at least twice per year and when necessary with as main missions:

- Review the project functioning and its activities progress
- Supervise, validate project activities and reports
- Identify strategic choices
- Ensure risk control
- Validate the annual programs (including the ESMP) and related budgets,
- Validate the progress reports and the obtained results ,
- Validate the adjustments and changes in the project activities,
- Ensure consistency of the project with the sector policies and government programs.



The Steering Committee recommendations focus on the orientation and strategies to be implemented to achieve the project objectives in compliance with the Government and the ADA policies..

**Regional Monitoring Committee (CORES) / Three regional CORES**

The project will implement a regional monitoring committee (CORES), which will be implemented in two regions (Marrakech-Safi and Souss Massa) and which will have the following roles:

- Ensure interactions between the regional and local levels, on the one hand, and the Steering Committee of the project, on the other hand;
- Mobilize local institutional stakeholders
- Encourage interaction between local communities and development partners;
- Review and propose to COFIL the adjustments and changes in project activities;
- Ensure the project agreements implementation; and
- Capitalize on the learned experiences and lessons from the project interventions.

The CORES meetings will be held every six months on a rotating basis in each province. The CORES will be composed of representatives of the departments and institutions operating at the level of the concerned regions.

**Provincial Local Committee (COLOP) :**

The project will also implement the Provincial Local Committee (COLOP) in the various provinces of the two regions of the project. The COLOP will have the mission:

- Examine the problems impeding implementation of the programs,
- Follow the evaluation plan execution progress and the follow-up of the evaluation conclusions,
- Ensure the communication strategy implementation (Identification of the of dissemination means support, exchange of information)
- perform the actions in favor of equal opportunities between women and men,

- Examine any proposed amendment submitted by the Management Unit.

#### Project Management Unit

With respect to the Project management, ANDZOA will host a Project Management Unit (PMU) under supervision of Argane Development Direction. This unit will coordinate the monitoring and implementation of the project activities with the ADA and the other partners. The PMU will adopt an integrated and multi-sectoral approach and will focus on the beneficiary's participation and active involvement at all levels of decision-making. This unit will be responsible, inter alia, of the coordination of all the project activities, the regional monitoring Committee activities (CORES) and the provincial local Committee (COLOP) organizations, the project results valorization and the communication strategy implementation. The PMU will be composed of the following staff:

- National project coordinator,
- arboriculture/horticulture Specialist (argan-culture);
- Rural engineering specialist,
- Environment, Social and Gender specialist,
- Procurement and financial management specialist,
- Monitoring and evaluation specialist.

It should be noted that the contracts will be signed with the Argan tree orchard plantation contractors will be monitored by the PMU. These companies are subject to the regulations in place in terms of how they conduct business. On the other hand, hundreds of companies have accumulated extensive experience in the works related to planting orchards plantations for three main reasons: - The implementation of the Green Morocco Plan has seen the rise of companies experienced in orchard plantation work. - The implementation of the Millennium Challenge Corporation Program has reinforced and improved the quality of the contractors in the plantation of orchards; - The pilot project in Argan orchards (RASMOKA) demonstrated the high performance of contractors and their ability to perform well in these type of works.

Moreover, the experience of IVA researchers at INRA and Agadir as well as that of ANDZOA staff will ensure qualified training in both the conduct of works of Argan orchards but also to the beneficiaries.

#### Key governance actors – implantation arrangements

The Executing Entity for this project is ANDZOA which is responsible for managing the project including the monitoring & evaluation and for the effective use of ADA resources.

The Executing entity is required to implement the project in compliance with ADA rules and national policies and procedures for procurement. These include relevant requirements on fiduciary, procurement, environmental and social safeguards, and other performance standards. In legal terms, this is ensured through agreement between ADA and ANDZOA to govern the use of the funds.

The following parties will enter into agreements with ANDZOA to assist in successfully delivering project outputs and are directly accountable to ANDZOA as outlined in the terms of their agreement : ABH SM, DRA SM and others stakeholders.

The project will use ADA's and ANDZOA's operational manuals for financial management<sup>14</sup> and procurement policies. ADA and ANDZOA, as a public agency, have the same operational manuals for FM and procurement policies. To execute projects locally, ANDZOA have an additional operational manual for implementation with local partners. This operational manual is in line with their operational manual and in line with public expenditures code.

ADA's overall role as an Accredited Entity is to provide oversight and quality assurance. This role includes: (i) project preparation oversight; (ii) project implementation oversight and supervision, including financial management; and (iii) project completion and evaluation oversight. It also includes oversight roles in relation to reporting and knowledge-management.

The 'project assurance' function of ADA is to support the Project Board by carrying out objective and independent project oversight and monitoring functions. This role ensures that appropriate project management milestones are managed and completed. Project assurance has to be independent of the Project Manager; therefore, the Project Board cannot delegate any of its assurance responsibilities to the Project Manager. An ADA Program Officer, typically holds the Project Assurance role on behalf of ADA.

ADA will ensure compliance with the GCF's Fiduciary Principles and Standards, including anti-corruption and AML/CFT requirements.

Annual financial audit will be done by an independent external auditor mandated by AE. This financial audit will be open also for international bidding auditing. Also, AE will use the financial reporting standards (e.g. IFRS) for the project.

A specific agreement for the project will be signed between ADA and ANDZOA. It will be clearly specified that expenditures, not included in the project activities, will not be counted in the project budget.

<sup>14</sup> <http://www.ada.gov.ma/web/typedocument/20>

The project expenses, including evidence will be classified into technical, administrative and financial monitoring reports .for that, ADA commit its own administrative and financial assistance for the project to ensure conformity of expenditure for each activity and will conduct a periodic audit during the implementation phase..

The financial management and procurement of this project will be guided by ADA financial rules and regulations (Procurement manual of ADA) and the National expenditure Code.

Project will be audited following the ADA financial rules and applicable audit guidelines and policies along with any specific requirements agreed in the AMA with the GCF. In line with ADA guidelines and for financial reviews of project expenditures will be conducted to ensure funds are used for the purpose intended in the approved proposal.

ANDZOA is the Executing Entity and will be responsible for the overall implementation, technical supervision and execution of the project. It will oversee and coordinate the implementation, monitoring; execute agreements with the local contractor and ANDZOA's partners, to ensure effective implementation. ANDZOA, will lead in all project procurement activities including management of the supply and service contracts of various suppliers, preparation of administrative, technical and financial reports to ADA.

GCF resources will be provided to the implementing partner. The funds will flow to ADA special account through GOM financial systems. Under ADA's implementation modality, ADA advances cash funds on a Work Plan and Annual budget (WPAB- Plan de Travail et Budget Annuel- PTBA) basis to ANDZOA (executing entity) for the implementation of agreed and approved program activities. The funds will flow in accordance with ADA standard policies and the ADA's procurement manual. ANDZOA reports back expenditure via a financial report on annual basis to ADA. Any additional requirements will be as in accordance with the AMA as and when it is agreed;

ANDZOA will engage expenditures for works and goods according planned activities by International or/and National competitive bidding for activities (works, consultants, services, workshop, training) based on Quality and Cost Based Selection (QCBS) for amount more than 40 000 USD. Payments terms will be specify into the Term of References for activities and services. For services which cost less than 40,000 USD, ANDZOA may hire direct consultation procedure based on based on Least Cost Selection (LCS).

ANDZOA will act as delegated contracting authority for the activities of planting and rainwater harvesting. It will establish two agreements respectively with Agency for Hydrological Basin of Souss Massa - ABH SM and Regional Directorate of Agriculture Souss Massa- DRA SM). The two agreements will specify the technical role of the ABH and DRA and their respective financial contributions (co-financing) in the project. Co-financing from ABH-SM and DRA-SM will be mobilized from their annual budget. Activities to be conducted under the two agreements will be paid by ANDZOA for the Grant coming from GCF, co-financing part will be paid thought ABH and DRA directly to their contractors. ANDZOA will check the accordance of co-financing flow as developed in the Funding proposal.

The project will apply international accounting financial reporting standards for the project reporting.

ADA will ensure compliance with the GCF's Fiduciary Principles and Standards, including anti-corruption and AML/CFT requirements.

Any project financed by international fund is automatically submitted for annual audit by the General Finance Inspectorate. The report of the General Finance Inspectorate is shared with the accredited entity and made available to donors.

### C.8. Timetable of Project/Programme Implementation

Please provide a project/programme implementation timetable in [section I \(Annexes\)](#). The table below is for illustrative purposes. If the table format below is used, please refer to the activities as numbered in Section H. In the case of outputs, please mark when all the required activities will be completed.

TASK	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Component 1: Implementation of the organiculture on 10 000 ha</b>																								
Result 1.1	<i>Result 1.1: Arganiculture on 10,000 ha implemented</i>																							
Activity 1.1.1	Arganiculture on 10,000 ha																							
Result 1.2	<i>Result 1.2: Intercropped seedling promoted and practiced on 2,000 ha.</i>																							
Activity 1.2.1	Medicinal and aromatic plants Intercropped with argane on 2000 ha																							
Result 1.3.	<i>Result 1.3 : water harvesting strengthened</i>																							
Activity 1.3.1.	Water harvesting and water and soil conservation																							
Result 1.4	<i>Result 1.4: technical support provided and skills and knowledge of beneficiaries strengthened and developed</i>																							
Activity 1.4.1.	Technical assistance and works supervision																							
<b>Component 2: Organization of the upstream components of the argane value-chain</b>																								
Result 2.1.	<i>Result 2.1: Professional organizations on the upstream of Argan sector structured and GIE</i>																							
Activity 2.1.1.	mobilization and supervision of the entitled persons and farmers and their professional organization (OP).																							
Activity 2.1.2.	Support GIE creation																							
Result 2.2.	<i>Result 2.2: Argan's products are valued</i>																							
Activity 2.2.1.	Argan product collection units implementation																							
Activity 2.2.2.	Installation of argane oil extraction unit																							
<b>Component 3 : capacity building, knowledge management, Co-management of Natural Argan Forest and scientific research promotion</b>																								
Result 3.1.	<i>Result 3.1: Climate change management Capacities of institutional actor, elected representatives and professional organizations are reinforced and developed (RBA Co-management)</i>																							
Activity 3.1.1.	Information and training on climate change challenges and Co-management of Argan Forest																							
Activity 3.1.2.	Co- Management of Natural Argan Forest																							
Result 3.2.	<i>Result 3.2: Argan research is consolidated and encouraged</i>																							
Activity 3.2.1.	Support for the implementation of the Argan National Center (CNA)																							
Activity 3.2.2.	Support for the concretization of the Argan Research-Innovation Federator Program.																							

## D.1. Value Added for GCF Involvement

*Please specify why the GCF involvement is critical for the project/programme, in consideration of other alternatives.*

The project represents the first step in the implementation of the NAMA Arganiculture which is part of Morocco's commitment to the mitigation component. Indeed, its commitment to reduce its greenhouse gases and will require access to climate finance.

It should be noted that the Moroccan government has contributed to the mitigation aspect of climate change but still cannot meet the needed levels for financing Arganiculture due to strong and competing demand for the mitigation component in other industries and sectors (including industry energy).

On the other hand, since the signing of the Framework Convention for the domestication of the argan tree (argan contract program targeting 5,000 hectares) ANDZOA and its partners were able to start the planting of 600 hectares only due to lack of availability of financing. Also, ANDZOA received funding requests for the realization of Argan Tree Orchards for an area of 3,000 hectares since 2014. This demand has not been met either due to lack of funding. Furthermore, although this project has been shown to be profitable, the traditional banking system has not adapted its funding mechanisms because of lack of successful and profitable experiences in the past. This reinforces the need for funding by the GCF in response to the strong local demand for arganiculture projects in the area.

Without GCF funds, no resources will be available for the implementation of the proposed activities. This would have potentially negative consequences for :

- The Carbon Stored area on Argan as described by the baseline scenario.
- Protection against flooding and the mobilization of water resource
- The pressure on the argan natural forest
- Populations socio-economic conditions mainly women.
- Promoting arganiculture sector as Mitigation to Climate Change, with high added value and as an alternative to the pressure on the argan natural forest and the water resources
- The implementation of the NAMA-Arganiculture as concept and GOM commitment to mitigation of GHG

The following considerations support this statement:

- The rate of erosion in the Souss-Massa about 400t / km<sup>2</sup> / year with a peak of 600 t / km<sup>2</sup> / year in the watershed Abdelmoumen
- Argan forest degradation;
- 300 cooperatives and 6,500 women working in the sector
- A loss of a sequestration potential of 1, 7 million TEQ. CO<sub>2</sub>.
- The living conditions of more than 26.000 of population.
- Durability and preservation of the RBA and naturals resources
- Capacity building of all stakeholders including the direct and indirect beneficiaries in management and of the climate change dimension in regional planning and implementation of development programs

In addition the project area is part of the priority areas targeted by NAMA. Also, this project targets the Argan tree preservation qualified as a species endemic of Morocco.

The project will contribute to :

- the implementation of the first phase of NAMAs Arganiculture, about ¼ of the planned area, and stimulate recourse to other means of financing including access to bank credit.
- to achieving the objectives of carbon sequestration as it was approved in the NAMAs but also ensure profitability for the beneficiaries while contributing to the preservation of natural Argan tree forest and help stabilize the selling price of argan products on the international market.
- to the empowerment of rural women while allowing them to earn a stable source of income and valuing their work.

## D.2. Exit Strategy

*Please explain how the project/programme sustainability will be ensured in the long run, after the project/programme is implemented with support from the GCF and other sources, taking into consideration the long-term financial viability demonstrated in [E.6.3](#). This should include a description of strategies for longer term maintenance of physical assets (if applicable).*

The formulation of the Project capitalized on the strengths and weaknesses of other similar programs / projects occurring in the region of argan trees; particularly, in the areas of climate change adaptation, sustainable management of natural resources, community development and capacity building.

Everybody agrees that the sustainable management of natural resources must be founded on a strategy for the integrated management of lands, water and biological resources, among which the local populations (producers and users) are considered to be an essential component of these ecosystems.

Nowadays, we recognize more and more the fact that the capacity of adaptation of the natural capital can be significantly increased when it is associated with the human, physical and social resources. Therefore, a bigger empowerment of the local actors in planning and implementation adaptation actions, investment in capacity building must be considered as a crucial element of sustainability of actions. Similarly, the project will be very attentive to social mobilization and to raising awareness of all categories of oases populations (including women and young people) on the key issues of their ecosystems.

The project will adopt a strategy of effective exit to guarantee its sustainability on all the institutional plans that are technical or environmental.

In terms of institutional sustainability, the project will be based on the following aspects:

- The recourse to existing institutions, at central and local level, in the implementation of the project, which guarantees the continuity after the end of the project.
- The contracting with the partners of execution concerning the implementation and the maintenance if necessary of the activities that are relied to them.
- The empowerment of all the local actors by means of a capacity building program, adapted to their specific needs.
- The implementation of an effective system of management and sharing of knowledge to capitalize the experiences effectively, and integrate them into national policies.

The environmental sustainability of project inputs will be made through interventions adapted to the climatic context of the area. The project will support the domestication of this sector which will have a direct impact on ecosystem pressure of the argan tree and which undergoes a strong threat and effects of CC.

The project will focus on actions of superficial hydric mobilization of resources to support on one hand the water supply and limit the degradation of grounds on the other hand. This is insured by the actions of rainwaters harnessing which will durably improve the hydraulic balance sheets. Regarding the component of supporting initiatives of conservation and strengthening the resilience of ecosystems, the interventions of the project will be implemented according to call of projects procedures, which should foster the implication of the local organizations and improve durability and scattering of mitigation actions.

As for the technical durability of project actions, it is based on the regional and national consolidation of technics and the technologies related to argan tree, and the collection and the harnessing of rainwaters, packaging of agricultural products; Moreover, the methods of intervention, the technologies and spread techniques will be improved and scaled up. The project will also look for sustainability by completing the past investments in natural resources domains through community support and maintenance.

To strengthen the economic and financial viability, the project will focus on disseminating practices, technologies and techniques that help to improve the productivity of the agricultural activities and strengthen households involved in these activities. Communication Initiatives and division knowledge will be essential element of assuring sustainability of the program. A close partnership will be established with sectorial programs for the dissemination of technology.

The project represents the first phase of the implementation of NAMAs Arganiculture and sustainability of the project will be assured by the beneficiaries, partners and the Moroccan government through ADA and ANDZOA.

- The implementation of the project: Beneficiaries will ensure irrigation of the plantations in the three years after planting (the first two years will be provided by companies that have the orchard planting contracts). Beneficiaries will continue irrigation and fruit tree pruning after project completion.
- The interest groups will be trained to ensure both the maintenance of the plantations, harvesting of the fruit and adding value to the product. These groups will ensure project sustainability after completion and its implementation.

- These interest groups will have to invest more to raise further funding to ensure the sustainability of the project. The Interest Group hybrid model developed by the Ministry of Agriculture and the Ministry of Finance will adapt better to market conditions when compared to the pure private sector thus stimulating the growth and expansion of this sector.
- The project implementation will follow the approach developed as part of Pillar 2 of the Green Morocco Plan. This approach promotes the aggregation of farmers and parcels into larger cooperatives, and interest groups that will fulfill their role in the value chain by supporting the maintenance of orchards, development of products and better market access.
- These interest groups will have the support of the Moroccan Government through ADA with the goal of developing quality local products through a dedicated local produce department. This department's mission is to assist in the promotion of local products ;
- The ANDZOA will continue to ensure sustainability of the project by the implementing regular monitoring of the activities after the implementation phase

Furthermore, Morocco's commitment to reduce its greenhouse gases will guarantee the project's sustainability after its implementation since it is part of the NAMA Arganiculture program supported by the joint efforts of the Ministry of Agriculture and Fisheries and the Ministry Environment (NDA) that have pledged to reduce CO2 emissions by up to 32%.

In this section, the accredited entity is expected to provide a brief description of the expected performance of the proposed project/programme against each of the Fund's six investment criteria. Activity-specific sub-criteria and indicative assessment factors, which can be found in the Fund's [Investment Framework](#), should be addressed where relevant and applicable. This section should tie into any request for concessionality made in [section B.2](#).

## E.1. Impact Potential

Potential of the project/programme to contribute to the achievement of the Fund's objectives and result areas

### E.1.1. Mitigation / adaptation impact potential

*Specify the mitigation and/or adaptation impact, taking into account the relevant and applicable sub-criteria and assessment factors in the Fund's [investment framework](#).*

*When applicable, specify the degree to which the project/programme avoids lock-in of long-lived, high emission or climate-vulnerable infrastructure.*

The Project will allow carbon sequestration of 2,091,201 T.eq.CO2 toward 2030, as compared to a 'without project' scenario (345,009 T.eq.CO2), broken down as following: the methodology to estimate the Carbone sequestration is part of NAMAs methodology to estimate the Carbone sequestration<sup>15</sup>.

Action	NAMA- arganiculture Emission (+) / sequestration (-) in T.eq.CO <sub>2</sub>	DARED Emission (+) / sequestration (-) in T.eq.CO <sub>2</sub>
	43,000 ha toward 2030	DARED Project
New argan orchards in association with crops	-2 282 586,00	-530 833,95
Additional benefit related to the preservation of argan forest	- 154 074,00	-154 074,00
Burning of shells	170,00	170,00
Diesel consumption for irrigation	280,00	280,00
"Without action" scenario consisting of the plantation of argan orchards in the framework of the strategy implemented by ANDZOA	- 345 009,00	-80 234,65
Total balance	-2 091 201,00	-604 223,30

The carbon mitigation of the project has been calculated on NAMAs Arganiculture by using the Ex Ante Carbon-balance Tool (EX-ACT) program of FAO<sup>16</sup>. EX-ACT consists of a set of Microsoft Excel spreadsheets, related to one another, in which are embedded the database on land use and planned management practices. This tool allows calculating ex-ante carbon balance (difference between GHG emissions and sequestration of CO<sub>2</sub>) of mitigation actions in agriculture or forestry.

Parameter set for EX-ACT:

- Climate: Temperate warm and dry
- Soil: High Activity Clay Soils (Batje, 2010)
- Duration, :
  - o Implementation: 9 years
  - o Capitalization: 11 years
- Surface
- Land Use Change
  - o Initial vocation of land
  - o final vocation of land:

<sup>15</sup> Etude stratégique d'atténuation des émissions des gaz à effet de serre dans le cadre du PMV –Elaboration d'une liste de NAMAs potentielles- rapport de la mission II- page 14 à 28- 2014

<sup>16</sup> <http://www.fao.org/tc/exact/accueil-ex-act/fr/>

- Carbon sequestration rates in soils: default (Level 1)
  - o

### E.1.2. Key impact potential indicator

Provide specific numerical values for the indicators below.

GCF core indicators	Expected tonnes of carbon dioxide equivalent (t CO <sub>2</sub> eq) to be reduced or avoided (Mitigation only)	Annual	<b>-120 844,66</b>
		Lifetime	<b>-604 223,30</b> Direct Beneficiary : 26 000
	<ul style="list-style-type: none"> <li>▫ Expected total number of direct and indirect beneficiaries, disaggregated by gender (reduced vulnerability or increased resilience);</li> <li>▫ Number of beneficiaries relative to total population, disaggregated by gender (adaptation only)</li> </ul>	Total	
		Percentage (%)	

Other relevant indicators	<p>Examples include:</p> <ul style="list-style-type: none"> <li>- Expected increase in the number of households with access to low-emission energy</li> <li>- Expected increase in the number of small, medium and large low-emission power suppliers, and installed effective capacity</li> <li>- Expected increase in generation and use of climate information in decision-making</li> <li>- Expected strengthening of adaptive capacity and reduced exposure to climate risks</li> <li>- Others</li> </ul>		
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Describe the detailed methodology used for calculating the indicators above.

Describe how the project/programme's indicator values compare to the appropriate benchmarks (i.e. the indicator values for a similar project/programme in a comparable context).

#### Expected tonnes of carbon dioxide equivalent (t CO<sub>2</sub> eq) to be reduced or avoided

The carbon mitigation of the project has been calculated using the Ex Ante Carbon-balance Tool (EX-ACT) program of FAO (see <http://www.fao.org/tc/exact/accueil-ex-act/fr/>). EX-ACT consists of a set of Microsoft Excel spreadsheets, related to one another, in which are embedded the database on land use and planned management practices. This tool allows calculating ex-ante carbon balance (difference between GHG emissions and sequestration of CO<sub>2</sub>) of mitigation actions in agriculture or forestry.

## E.2. Paradigm Shift Potential

Degree to which the proposed activity can catalyze impact beyond a one-off project/programme investment

### E.2.1. Potential for scaling up and replication (Provide a numerical multiple and supporting rationale)

Describe how the proposed project/programme's expected contributions to global low-carbon and/or climate-resilient development pathways could be scaled-up and replicated including a description of the steps necessary to accomplish it.

The proposed project will reduce GHG emissions and will generate several beneficial impacts on environmental, agronomic, economic, technological in terms of agricultural development and wealth creation. These benefits will transform wild argan in a sustainable development model for the argan industry. Additional effects can be expected, such as improving access to raw (argan seeds, fodder) and processed products (livestock

compound feed, argan oil) to the local and international market, strengthening links with research and agricultural development supported by the national strategy for promoting the agricultural sector.

The project represents the first implementation step of the NAMA Arganiculture. This will contribute to achieving the targets set by NAMA arganiculture in reducing greenhouse gas emissions and carbon sequestration. The project will also reduce the pressure on the Argan Biosphere reserve and contribute to a more sustainable development model for a more resilient environment.

In the long term, the project will contribute to achieving the objectives of NAMAs Arganiculture. The project will change the family business model practiced in the biosphere reserve by converting it into a profitable business with a new stable farming activity and sector. In other words, the domestication of the argan tree through orchards represents a paradigm shift in the mode of exploiting the land and the natural forest in an environment threatened by the effects of climate change.

At completion, the project will ensure the leverage of the implementation of NAMAs arganiculture and remove current barriers hindering its development. The project will demonstrate the profitability of the Arganiculture and attract diverse financial products from the banking sector; The hybrid interest group model designed as part of the project, is an innovation that will reinforce the private sector's involvement in this sector; This could be a source of inspiration and encouragement of private operators (large farmers in the region) to convert to arganiculture orchards while stimulating change in their current operating practices ( excessive use of water) to a more profitable arganiculture model that is sustainable in conserving resources and promoting mitigation of climate change.

The project will promote the development of interest groups able to access credit and market funding sources and consequently reduce the recourse to grants. The project is a catalyst to a dynamic and sustainable development model for the Argan Biosphere Reserve.

The implementation of the project will contribute to :

- Vegetation of bare soils ;
- Shift from sylvo-pastoral to agricultural system ;
- New income-generating activities (agriculture, animal feed processing) ;
- Introduction of PAM crops ;
- Creation of new professional organizations ;
- Integration of local communities to national and international market ;
- Alleviation of rural exodus ;
- New economic dynamics triggered ;
- Sustainable approach in co-management of the Argan Natural Forest

### E.2.2. Potential for knowledge and learning

*Describe how the project/programme contributes to the creation or strengthening of knowledge, collective learning processes, or institutions.*

The project's component 3 includes :

- Activities related to capacity-building of all actors and beneficiaries aiming to strengthen their capacity to mitigate to climate change.
- Activities related to knowledge management. In particular, the project will implement a comprehensive M&E system, document its activities, promote the sharing of experiences and disseminate its findings.
- A research activity which is expected to share experiences and disseminate results.
- Improving Technical aspects, social aspects and economics aspects ;
- Co-management of argan natural forest.

### E.2.3. Contribution to the creation of an enabling environment

*Describe how proposed measures will create conditions that are conducive to effective and sustained participation of private and public sector actors in low-carbon and/or resilient development that go beyond the program.*

*Describe how the proposal contributes to innovation, market development and transformation. Examples include:*

- Introducing and demonstrating a new market or a new technology in a country or a region
- Using innovative funding scheme such as initial public offerings and/or bond markets for projects/programme

The proposal Project contributes to innovation and transformation through the following elements :

- Promoting of arganiculture as an innovative response to climate change.
- Domestication of PAM in arid area;
- Structuring of argan natural forest actors (cooperative and association) in sustainable GIE able to penetrate international market and

then bring more value to the territory and to local population particularly women.

- Supporting structure dedicate to resolve argan's problematic in terms of Research & Development
- Contribute to reduce pressure on argan natural forest by promotion of co-management and sustainable approach.

#### E.2.4. Contribution to regulatory framework and policies

*Describe how the project/programme strengthens the national / local regulatory or legal frameworks to systematically drive investment in low-emission technologies or activities, promote development of additional low-emission policies, and/or improve climate-responsive planning and development.*

The project will develop a model of preservation of the RBA and co-management among the various stakeholders. The starting conditions of the plantation will stipulate the responsibility and involvement of beneficiaries in the preservation of natural forest and contribute to preserve it (limiting access for a predetermined time to collecting argan fruits of the natural forest thereby allowing natural regeneration); Through the implication of the different partners in preserving the RBA.

### E.3. Sustainable Development Potential

Wider benefits and priorities

#### E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact

Profit for Sustainable Development:

- Protection of Argan Biosphere and combating soil erosion.
- Co-management of Argan Natural Forest as a sustainable approach.

Benefit to society:

- Increase revenue from professional farmers and organizations;
- Promoting the role of women in value chain of the argan tree.
- Fight against the rural exodus
- Improving livelihood of local populations
- Promoting gender employment

Profit for adaptation to climate change:

- Increased agricultural production in areas degraded by planting the argan tree in degraded areas with low vegetation cover. Soil protection against water and wind erosion.

Economic profit

- Contributing to promote argan nurseries
- Increasing production of argan oil

**OTHERS POTENTIAL IMPACT OF PROJECT :**

- Argane area/household

The average area exploited by beneficial holders and per household is estimated at 2.6 hectares<sup>17</sup>. It will be increased with the project after completion to an average of 5 hectares / household.

- Argane production/ household (MT)

The production of the argan fruit will be increased on average of 5 tons / household after five years for project's implantation. It's mean an additional production of 50 000 tons instead of 1.9 tons / household (baseline).

- Labor for kernel extraction (Hr)

The project will have a significant impact on employment promotion and emancipation of rural women. Indeed, at 800 hours of work kernel a ton of fruit for an income 4.5 dollars per day per woman. The project will provide a double workday for women five years after project completion. Ten years after starting the project, the volume of hours for kernel will be increased by 6000 hours.

- Impacts on arganeraie biosphere reserve (RBA)

The project aim to reduce the pressure on the argan biosphere reserve and increasing the resilience of the biosphere to fight against the effects of climate change and contribute to reduce the soil erosion in the RBA and improve best practices. In fact, the project will increase the average surface area per household to 5 hectares from the 2,5 hectares actually in the case of business as usual. Also, if the worst case scenario of climate changes is felt, the argan region may become too dry and too hot to continue hosting the argan tree. Vast expanses of argan orchards might then be unsuited for the tree<sup>18</sup>.

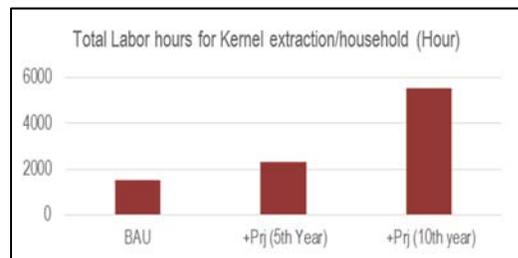
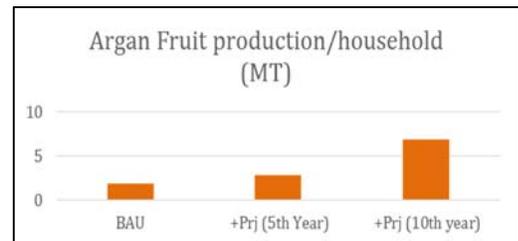
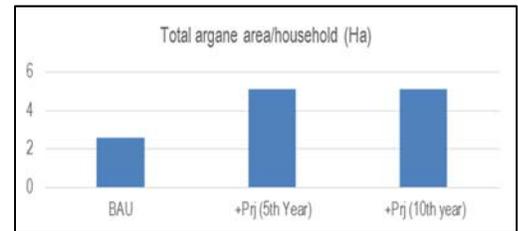
- Impacts on biodiversity

The project aims to improve the biodiversity through planting Medicinal and Aromatic Plants on 2000 hectares and developing the resilience of Argan tree in degraded environment. In fact, the first experience that was conducted in the region demonstrate how arganiculture orchards contribute to preserving the biodiversity (photo bellow demonstrate the impact of arganiculture in the degraded area).

- Capacity Building, social and cultural impact :

- o Capacity building in agriculture and sustainable collective management of planted areas for partners and stakeholders
- o Installing a school in the field dedicated to arganiculture
- o Capacity building for research actors
- o Strengthening links between regions where the project is carried out (exchanges, meetings at fairs, ...);
- o Awareness about environmental protection and risks related to climate change;

Capacity building through training on topics such as health, hygiene and safety



**E.4. Needs of the Recipient**

Vulnerability and financing needs of the beneficiary country and population

**E.4.1. Vulnerability of country and beneficiary groups (Adaptation only)**

<sup>17</sup> Etude relative à l'étude 'Etude de mise en place des Groupements d'intérêt économique des ayants droits au niveau de l'arganeraie, ANDZOA, 2014

<sup>18</sup> Lybbert T. J., A. Aboudrare., 2011. Win-Lose ? The argan products valorization seems to benefit rural households while harming the endemic argan forest. in Premier Congrès International sur l'Arganier : Acquis et perspectives de recherche scientifique. Agadir, Maroc, 15-17 Décembre 2011.

*Describe the baseline scenario (i.e. emissions baseline, climate vulnerability baseline, key barriers, challenges and/or policies) and the outcomes and the impact that the project/programme will aim to achieve in improving the baseline scenario.*

### Climate vulnerability

Most of the argan tree in the natural forest grows on shallow, rocky and poor soils. The vegetative cover in the argan forest decreases is favoured by wind and water erosion, particularly in watersheds. Some studies estimate the rate of erosion in the Souss-Massa about 400t/km<sup>2</sup>/year with a peak of 600t/km<sup>2</sup>/year in the Abdelmoumen watersheds. The severe climate prevailing conditions, coupled to sloppy topography, are causes of significant erosion. This situation is aggravated by the low rate of soil recovery due to the use of inappropriate farming methods and overgrazing.

The climatic conditions of southwest of Morocco are highly arid. Annual rainfall displays significant fluctuations descending in some years below 100 mm. The alternation of long dry periods and short rainy periods is one of the characteristics of the climate of the region with prolonged drought periods contributing to degradation of the prevailing vulnerable ecosystems..

Regarding biodiversity, many endemic plant species are associated with the argania woodlands. They have many different uses ranging from food, aromatic, medicinal, nutritional...etc.

### challenges and/or policies

The actual natural argan forest ruled by a specific forestry law. It is managed under complex tenure system in which the trees are state property but usufruct rights including nuts harvesting are granted to resident communities and regulated by customary rules that vary from private ownership to open access. However, the local population is abandoning these traditional usage rights as a result of the argan oil boom and socio-economic mutations. Recent studies show that the argan forest undergoes slow density and area decrease due to climate change and unsustainable use.

Local communities have developed important knowledge and skills related to forest use and conservation. This knowledge coupled with scientific research results will be of great use to support managing arganiculture platform. To ensure that individual knowledge is developed and shared, the project includes several actions for managing and sharing knowledge.

It is primordial to highlight that the Arganiculture is a main component of the Moroccan agricultural strategy, called Green Morocco Plan (GMP) which aims to support government efforts in order to relieve the pressure on argan forest zones, improve the living conditions of populations by increasing their incomes, and increase the resilience through diversification of activities which are less reliant on argan area and water.

### Overview of areas and beneficiaries of the proposed Arganiculture project:

The perimeters of the proposed Arganiculture project are predominantly (79%) less than 200 ha in area with more than 51% less than 100 ha in area and land ownership being completely private.

The existing plant cover in these sites formed majority of the argan tree (68%), followed by PAM and cereals. In terms of availability of water, 88% of the sites have potential water sources. In terms of beneficiaries, the analysis shows an average of 167 beneficiaries per site with a total number beneficiaries out of the 44 sites being 7348 persons.

The demographic data of the local villages (village ) within the Arganiculture sites reveals that the small villages contain on average a population of less than 1,000 inhabitants (95%) with a number of households below 400 (97%). The average number of inhabitants per village is 760 people. The number of indirect beneficiaries of the projects in these villages is estimated at 26,000.

The socio-environmental development indicators of the villages show that:

- The majority of these village (60%) have a rate of access to drinking water above 50%;
- 90% of village have 100% access to electricity;
- 61% of village have rudimentary road access
- No village have collective sewage systems, the use of septic tanks is predominant.
- 20% of village have basic health services.

The analysis of socio-economic data of local towns hosting these Arganiculture perimeters shows that primary school enrollment rate is on average close to 95%, middle school is around 83% and for high school is 62%. The illiteracy rate is on average close to 63%. The main economic activity in these municipalities is farming followed by livestock and finally tourism. The average unemployment rate of these municipalities is 32%. The

poverty rate, which represents the percentage of people whose standard of living is below the relative poverty line of 1745 DH/ month for rural communities (index 2004), varies for villages of project beneficiaries from 6 to 17% with a rate of 16% or more in 50% of recipients (map).

This project will contribute to improve soil conservation and fertility and to increase carbon storage in soil and biomass. It will directly improve the livelihood of local population, and especially women. This will support the decrease of anthropic pressure on the natural forest while improving argan fruit production and then help combating desertification. Some of the argan orchards will be implemented on converted private land from conventional agriculture. This program will also adopt water efficient technologies coupled with solar pumping system. The direct beneficiary population is estimated at 26,000 inhabitants.

Argan oil extraction is a labour intensive activity traditionally carried out by women. Argan domestication and cultivation in orchards (arganiculture), in association with forage crops, would improve argan oil production, while contributing to secure animal feed. This will support a sustainable sylvo-pastoral system and promote a new agro-forestry system, based on a semi intensive operation of argan orchards. Thus, It has been scientifically proven that argan oil have medicinal properties as it is rich in vitamin E and can lower the cholesterol levels, stimulates circulation of the blood, facilitates digestion and strengthens the body's natural defenses...etc.

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The climatic conditions of southwestern Morocco are highly arid. Annual rainfall displays significant fluctuations descending in some years below 100 mm. The alternation of long dry periods and short rainy periods is one of the characteristics of the climate of the region with prolonged drought periods contributing to degradation of the dominant but increasingly vulnerable ecosystems.

Local communities have developed important knowledge and skills related to forest use and conservation. This knowledge coupled with scientific research results will be of great use to support managing an arganiculture portal or learning application. To ensure that individual knowledge is developed and shared, the project includes several actions for managing and sharing knowledge.

#### E.4.2. Financial, economic, social and institutional needs

*Describe how the project/programme addresses the following needs:*

- *Economic and social development level of the country and the affected population*
- *Absence of alternative sources of financing (e.g. fiscal or balance of payment gap that prevents from addressing the needs of the country; and lack of depth and history in the local capital market)*
- *Need for strengthening institutions and implementation capacity.*

The project will target a vulnerable group among the 26 000 direct beneficiaries. The communities will be responsible for managing the natural resources in their perimeters or in argan natural forest. The project will also support viable wealth creation initiatives (ICR) especially for women and improve their incomes.

Investment in arganiculture is higher compared to the financial capacity of beneficiaries. The use of conventional financing (bank loans) is difficult due to the high interest rates that make the project unprofitable.

### E.5. Country Ownership

Beneficiary country (ies) ownership of, and capacity to implement, a funded project or programme

#### E.5.1. Existence of a national climate strategy and coherence with existing plans and policies, including NAMAs, NAPAs and NAPs

*Please describe how the project/programme contributes to country's identified priorities for low-emission and climate-resilient development, and the degree to which the activity is supported by a country's enabling policy and institutional framework, or includes policy or institutional changes.*

The project will contribute to the achievements of the national development strategy for the agricultural sector toward 2020 and beyond. The project is in line with the National Charter for Environment and Sustainable Development, which aims at strengthening a 'green economic growth'.

In particular, it is in accordance with the national strategy for the agricultural sector called “Green Morocco Plan”, which promotes food security through a sustainable improvement of productivity while saving natural resources.

Additionally, the project is the first phase of Appropriate Mitigation Measures at the National Level (NAMA) arganiculture which aims to develop arganiculture ( modern argan tree orchards), through domestication of the argan tree (*Argania spinosa* (L) Skeels) in association with crops on 43,000 Ha. This action will increase the carbon storage in biomass and soils. It will indirectly bring down the industrial and anthropogenic pressure on natural argan forests.

NAMA arganiculture proposes evolving the silvopastoral existing operating model to an agricultural model based on a cultivating model of the argan tree for plant production as a new sector under Pillar II of the Morocco Green Plan.

**E.5.2. Capacity of accredited entities and executing entities to deliver**

*Please describe experience and track record of the accredited entity and executing entities with respect to the activities that they are expected to undertake in the proposed project/programme.*

**ADA and ANDZOA CAPACITY**

*Refer to C.4*

**E.5.3. Engagement with NDAs, civil society organizations and other relevant stakeholders**

*Please provide a full description of the steps taken to ensure country ownership, including the engagement with NDAs on the funding proposal and the no-objection letter.*

**Please see annex I : Support letters of the different actors concerned by the project DARED**

*Please also specify the multi-stakeholder engagement plan and the consultations that were conducted when this proposal was developed.*

**MULTI-STAKEHOLDER ENGAGEMENT**

The MGP implemented the new strategy that helped restructure the agriculture sector in Morocco. As it is project based, it allowed the involvement of more synergy and inclusiveness of professional actors. This will impact positively the implementation of this program. In fact different agreements have been signed between all stakeholders involved in the development of the argane sector.

the MAMF will support the development of the value chain and the implementation of the arganiculture program. The HCEFLCD is in charge of the restoration of the natural forest. The regional water basin agencies will be involved to implement water harvesting infrastructure part of the project. Finally the producers organized in the FIMARGANE will be in charge of the implementation at the community level for better performance of the value chain (production to market). FIMARGANE will also insure through consultation at community level the participation of all groups mainly women and small scale producers. ANDZOA is in charge of promoting sustainable development of the oasis and argane territories to ensure the synergy between both areas and stakeholders,.

Principal stakeholders identified and their roles and responsibilities are mentioned follow :

Stakeholders	Roles and responsibilities
The High Commission for Water and Forests and the Fight against Desertification (HCEFLCD)	The High Commission is responsible for the development and implementation of government policies regarding the conservation and sustainable use of forest resources, hunting, inland fishing natural parks and reserves and the fight against desertification.
National Agency for the Development of the Oases and Argan Zones (ANDZOA)	Within the oasis and Argan ecosystem, the agency is responsible, in coordination with other government authorities, for developing a comprehensive development program and ensuring its implementation monitoring and evaluation.
Water Basin Agency for the SMD	Main functions include: (i) the development of an integrated water resources plan and ensuring its implementation; (ii) issuing permits and licenses for the use of public water resources, (iii) establishing flood prevention infrastructure and fighting against floods.
Regional Directorate of Agriculture	Responsible for the development and enactment of regional agricultural development plans based on national sectoral policies.

NGOs and Network of Associations of the Argan Biosphere Reserve (RARBA)	Key functions include: Associations at the local level (municipalities or Douars) working to support local development  (i) supporting community action for the preservation and proper management of natural resources, (ii) maintaining and enhancing cultural heritage, (iii) enabling and operationalizing the Argane Biosphere Reserve (ABR), (iv) technical and institutional support to member associations.
The Moroccan Association of Geographical Indication of Oil (AMIGHA)	As the holder of the PGI label for Argane oil the mission of the association is to coordinate and structure the work on the Argane value chain and identify with the professionals involved different strategies to promote the product and the PGI label.
Moroccan Inter-professional Federation of the Argan value chain (FIMARGANE)	Coordination and consultation between the various partners in the sector and acting as an interface between operators in the sector with government administrations and ANDZOA.
Moroccan Federation of Associations of Argan users	The Federation represents Argan user and defends their rights at local, regional and national levels
National Association of Argan Cooperatives (ANCA)	Professional organization providing technical support and promoting the partnership and mobilization of Argan cooperatives.
Cooperatives and their UNION	Promote the production and marketing of local agro-biodiversity products and support income generation of their members.
National institutions responsible for research, development and training	National institutions responsible for research, development and training in agriculture, forestry, environment and related disciplines: the National Institute for Agronomic Research (INRA); the Institute of Agronomy and Veterinary science (Hassan II); the National Forestry Institute (ENFI); the National School of Agriculture (ENA) Meknès; the University of Agadir, etc.
Regional Chambers of Agriculture	Represent the interests of its members (farmers) vis-à-vis public authorities, government and other stakeholders. It also has an advisory role to the administration and is asked to participate in development activities through training and information targeting farmers
Chamber of Commerce and Industry for Agadir	Represents its member's vis-à-vis public authorities and provides government with information and advice on matters that contribute to the development of trade, industry and services.

## E.6. Efficiency and Effectiveness

Economic and, if appropriate, financial soundness of the project/programme

### E.6.1. Cost-effectiveness and efficiency

*Describe how the financial structure is adequate and reasonable in order to achieve the proposal's objectives, including addressing existing bottlenecks and/or barriers; providing the least concessionality; and without crowding out private and other public investment.*

The financial structure for project implementation is presented in table below, which shows the allocation of resources among all four project component.

- For the first component: The large items are planting arganiculture orchard, intercropped seedling of Medicinal and aromatic plants and water harvesting.
- For the second component: the large item is the installation of argane oil extraction unit in the region. Its role is to make the link with stakeholders and market argan oil.
- For the third component: three activities will be implemented by developing the co-management of Argan Natural Forest as a sustainable model of doing business in the RBA. Also, the activity of research by implantation of the Argan National Center.

Table : Allocation of project resources

Component/activities	Description	Unit Cost (1000 \$)	Budget (1000 \$ US)	GCF	Co-financing
<b><u>Component 1</u></b>	<b><u>Component 1: Implementation of the arganiculture on 10 000 ha</u></b>	-	<b><u>35 280,00</u></b>	<b><u>77%</u></b>	<b><u>25%</u></b>
Result 1.1	Result 1.1: Arganiculture on 10,000 ha implemented	2,60	26 000,00	77%	23%
Activite 1.1.1	Arganiculture on 10,000 ha	2,60	26 000,00	77%	23%
<i>Sub-Activite 1.1.1.1.</i>	<i>Purchasing seedling</i>	<i>0,70</i>	<i>7 000,00</i>	<i>80%</i>	<i>20%</i>
<i>Sub-Activite 1.1.1.2.</i>	<i>Planting works</i>	<i>1,80</i>	<i>18 000,00</i>	<i>80%</i>	<i>20%</i>
<i>Sub-Activite 1.1.1.3.</i>	<i>Maintenance</i>	<i>0,10</i>	<i>1 000,00</i>	<i>0%</i>	<i>100%</i>
Result 1.2	Result 1.2: Intercropped seedling promoted and practiced on 2.000 ha.	1,12	2 240,00	99%	1%
Activite 1.2.1	Medicinal and aromatic plants Intercropped with argane on 2000 ha	1,12	2 240,00	99%	1%
<i>Sub-Activite 1.2.1.1.</i>	<i>Purchasing seedling</i>	<i>0,02</i>	<i>40,00</i>	<i>50%</i>	<i>50%</i>
<i>Sub-Activite 1.2.1.2.</i>	<i>Planting Works</i>	<i>1,10</i>	<i>2 200,00</i>	<i>100%</i>	<i>0%</i>
<i>Sub-Activite 1.1.1.3.</i>	<i>Maintenance</i>	-	-	<i>0%</i>	<i>100%</i>
Result 1.3.	Result 1.3 : Rainwater harvesting strengthened	65,50	5 240,00	57%	43%
Activite 1.3.1.	Water harvesting and water and soil conservation	65,5	5 240,00	57%	43%
<i>Sub-Activite 1.3.1.1.</i>	<i>Works implementation</i>	<i>62</i>	<i>4 960,00</i>	<i>60%</i>	<i>40%</i>
<i>Sub-Activite 1.3.1.2.</i>	<i>Technical studies and works supervision</i>	<i>3,5</i>	<i>280,00</i>	<i>0%</i>	<i>100%</i>
Result 1.4	Result 1.4: technical support provided and skills and knowledge of beneficiaries strengthened and developed	0,180	1 800,00	100%	0%
Activite 1.4.1.	Technical assistance and works supervision	0,180	1 800,00	100%	0%
<i>Sub-Activite 1.4.1.1.</i>	<i>works supervision</i>	<i>0,180</i>	<i>1 800</i>	<i>100%</i>	<i>0%</i>
<b><u>Component 2</u></b>	<b><u>Component 2: Organization of the upstream components of the argane value-chain</u></b>	<b><u>0</u></b>	<b><u>8 610,00</u></b>	<b><u>90%</u></b>	<b><u>10%</u></b>
Result 2.1.	Result 2.1: Professional organizations on the upstream of Argan sector structured and GIE		942,00	93%	7%
Activite 2.1.1.	mobilization and supervision of the entitled persons and farmers and their professional organization (OP).	348,0	348,00	80%	20%
Activite 2.1.2.	Support GIE creation	54,0	594,00	100%	0%
Result 2.2.	Result 2.2: Argan's products are valued		7 668,00	90%	10%
Activite 2.2.1.	Argan product collection units implementation	588,0	6 468,00	90%	10%
Activite 2.2.2.	Installation of argane oil extraction unit	1200,0	1 200,00	90%	10%
<b><u>Component 3.</u></b>	<b><u>capacity building, knowledge management, Co-management of Natural Argan Forest and scientific research promotion</u></b>	-	<b><u>5 298,00</u></b>	<b><u>85%</u></b>	<b><u>15%</u></b>
Result 3.1.	Result 3.1: Climate change management Capacities of institutional actor, elected representatives and professional organizations are reinforced and developed (RBA Co-management)	3 400,00	3 400,00	80%	20%
Activity 3.1.1.	Information and training on climate change challenges and Co-management of Argan Forest	1 200,00	1 200,00	80%	20%
<i>Sub Activity 3.1.1.1.</i>	<i>Information of institutional actors on climate change challenges and training on co-management of Natural argan forest</i>	<i>200,00</i>	<i>200,00</i>	<i>80%</i>	<i>20%</i>



2.3 Operational Cost	6	167	286	202	202	35	35	35	35	35	35	35	35	35	35	35	35	35	35	1 098
total project cost	7=(4+5+6)	1 820	12 051	14 921	15 282	11 012	128	141	141	141	141	141	141	141	141	141	141	141	141	46 645
3.Additional Net Value (Cash-flow)	8=(3-7)	-1 487	-12 486	-15 860	-16 602	-7 527	450	2 355	4 143	6 384	7 883	9 146	9 959	10 374	10 590	10 590	10 590	10 590	10 590	34 709

Please describe the GCF's financial exit strategy in case of private sector operations (e.g. IPOs, trade sales, etc.).

Not applicable

Please make a reference to E.6.5 (core indicator for the expected volume of finance to be leveraged).

Please describe financial viability in the long run beyond the Fund intervention.

### ECONOMIC BENEFITS OF PRODUCTION

As highlighted in the feasibility study (section 2.3.) developing the assumptions, the economic benefits of DARED are show below.

Economic benefits of Arganiculture production

TOPICS	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20
Production of argan fruits (T)	0	0	0	0	2250	13838	27113	42075	56273	61875	66600	69638	71190	72000	72000	72000	72000	72000	72000	72000
Quantity of fruit after drying (0,5 de la récolte) (T)	0	0	0	0	1125	6919	13556	21038	28136	30938	33300	34819	35595	36000	36000	36000	36000	36000	36000	36000
Nuts produced after pulping (0,6 de récolte séchée) (T)	0	0	0	0	675	4151	8134	12623	16882	18563	19980	20891	21357	21600	21600	21600	21600	21600	21600	21600
residual pulp (0,4 de récolte séchée)	0	0	0	0	450	2768	5423	8415	11255	12375	13320	13928	14238	14400	14400	14400	14400	14400	14400	14400
Amondons produced (0,1 de Noix p	0	0	0	0	67,5	415	813	1262	1688	1856	1998	2089	2136	2160	2160	2160	2160	2160	2160	2160
residuel fruit coque (0,9 de Noix prc	0	0	0	0	608	3736	7320	11360	15194	16706	17982	18802	19221	19440	19440	19440	19440	19440	19440	19440
Argan oil (40%, 1000 Litres)	0	0	0	0	27	166	325	505	675	743	799	836	854	864	864	864	864	864	864	864
Tourteau (60% d'amandons) (T)	0	0	0	0	40,5	249	488	757	1013	1114	1199	1253	1281	1296	1296	1296	1296	1296	1296	1296
Turnover (K\$)	0	0	0	0	714	4393	8607	13356	17863	19642	21142	22106	22599	22856	22856	22856	22856	22856	22856	22856
viarables expenses (K\$)	0	0	0	0	501	3025	5633	8326	10591	10872	11108	11260	11337	11378	11378	11378	11378	11378	11378	11378

Economic benefits of PAM production

TOPICS	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20
Production of PAM dried (T)	100	525	1150	1875	2625	2875	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
Production dried to be conditio	68	357	782	1274	1784	1954	2039	2039	2039	2039	2039	2039	2039	2039	2039	2039	2039	2039	2039	2039
Production to be distilled and cr	32	168	368	601	841	921	961	961	961	961	961	961	961	961	961	961	961	961	961	961
Turnover (K\$)	258	1353	2965	4834	6767	7412	7734	7734	7734	7734	7734	7734	7734	7734	7734	7734	7734	7734	7734	7734
Variables Expenses (K\$)	169	811	1703	2731	3779	3980	4081	4081	4081	4081	4081	4081	4081	4081	4081	4081	4081	4081	4081	4081
Gross Margin	2578	2707	2965	3223	3384	4941	5156	5156	5156	5156	5156	5156	5156	5156	5156	5156	5156	5156	5156	5156

Please describe the GCF's financial exit strategy in case of private sector operations (e.g. IPOs, trade sales, etc.).

Not applicable

**E.6.4. Application of best practices**

*Please explain how best available technologies and practices are considered and applied. If applicable, specify the innovations/modifications/adjustments that are made based on industry best practices.*

**E.6.5. Key efficiency and effectiveness indicators**

<i>GCF core indicators</i>	Estimated cost per t CO <sub>2</sub> eq, defined as total investment cost / expected lifetime emission reductions (mitigation only)	
	(a) Total project financing	US\$ <u>  49,2  </u>
	(b) Requested GCF amount	US\$ <u>  39,2  </u>
	(c) Expected lifetime emission reductions overtime	<u>          </u> tCO <sub>2</sub> eq
	<b>(d) Estimated cost per tCO<sub>2</sub>eq (d = a / c)</b>	US\$ <u>  66,25  </u> / tCO <sub>2</sub> eq
<b>(e) Estimated GCF cost per tCO<sub>2</sub>eq removed (e = b / c)</b>	US\$ <u>  66,25  </u> / tCO <sub>2</sub> eq	
<i>Describe the detailed methodology used for calculating the indicators (d) and (e) above. Please describe how the indicator values compare to the appropriate benchmarks established in a comparable context.</i>		
Expected volume of finance to be leveraged by the proposed project/programme and as a result of the Fund's financing, disaggregated by public and private sources (mitigation only)		
<i>Describe the detailed methodology used for calculating the indicators above. Please describe how the indicator values compare to the appropriate benchmarks established in a comparable context.</i>		
Other relevant indicators (e.g. estimated cost per co-benefit generated as a result of the project/programme)		

*\* The information can be drawn from the project/programme appraisal document.*

## F.1. Economic and Financial Analysis

*Please provide the narrative and rationale for the detailed economic and financial analysis (including the financial model, taking into consideration the information provided in [section E.6.3](#)).*

*Based on the above analysis, please provide economic and financial justification (both qualitative and quantitative) for the concessionality that GCF provides, with a reference to the financial structure proposed in [section B.2](#).*

### FINANCIAL AND ECONOMIC ANALYSIS OF THE PROJECT

The financial and economic analysis is complementary, the first to the individual contributions (individual earnings) and the second relates to the community as a whole. Three differences between the two analyzes:

In financial analysis, taxes are treated as costs and subsidies as compensation, while in economic analysis taxes and subsidies are classified as transfers;

- In financial analysis, market prices are used, these prices include taxes, subsidies, and distortions. In economic analysis, prices must be modified to reflect the social and economic values (reference price or hypothetical price);
- In financial analysis: interest is a cost and it is deducted. Whereas in economic analysis, interest is a share of the profitability of capital.

Economic analysis helps to identify projects that can contribute most to the increase in national income.

### PROJECT DURATION :

The duration of the project retained as part of this study is 30 years.

### DISCOUNT RATE

Today given a value greater than the same value tomorrow and quick recipe is better than a distant recipe. Discounting is essentially a technique to "reduce" costs of the flow and the flow of future benefits to their "present value." We can then study the difference between the present values (NPV) and determine the discount rate that will apply to the net present value is zero (measuring IRR of the project).

The interest rate varies from one period to another, it varies with expected inflation and the risk that the borrowed money is not repaid on time or not be repaid at all.

In the financial analysis, the rate or rates of return limit is usually the marginal cost of money for the operation, the company or the state. This is often the rate at which the investor can borrow money. If the additional capital to get is a mixture of equity and debt capital, the discount rate will be weighted to reflect the profitability necessary to attract both equity than debt capital. Probably the best discount rate is the "opportunity cost of capital."

In analyzing the projects of the World Bank, costs and benefits are updated from the beginning of the first year. It is convenient to start updating from year to coincide with the years of the project period' discount -that is to say that the year 1 of the project is updated by using the factor for the first period, etc ... Second, the costs are in practice paid for each year, not just the first of January.

In this study the discount rate is of the order of 6%.

### CONVERSION FACTORS ECONOMIC PRICES IN FINANCIAL PRICES:

Once the financial analysis of costs and benefits is made, the analyst must estimate the economic value of the project. Financial prices are the starting point of the economic analysis. They should be adjusted to reflect their value to the whole society.

The market price of a good or service should be changed to reflect its opportunity cost, ie its value to its best alternative use. The opportunity cost is also called accounting price (Shadow price) and is an estimate of the economic value of a good or service. Market prices do not always reflect the relative scarcity of goods or services.

We can say that financial analysis, the unit of account and "cash" that is commonly used as standard is the change in real income of the entity that is the subject of analysis, evaluated using internal market prices and generally expressed in national currency. But economic analysis, given that market prices do not reflect scarcity values, our unit of accounting is the change in real net national income measured as opportunity cost.

All aspects of the adjustment method will be applicable to all agricultural projects, just as not all aspects are equally important in the projects to which they apply. The complexity of certain calculations reminds us of the need for an economic analysis of the project, to improve the investment decision. The analyst must focus their attention on adjustments of financial accounts that may alter the decision to invest in the project under study. They must settle for approximate results and ignore unimportant adjustments that do not affect the decision to invest.

The financial cost of tangible property must be added to the economic values in three successive stages:

- Step 1: Adjustment for direct financial- transfers
- Step 2: Adjustment to reflect price distortions in the case of goods which are the subject of international trade, and
- Step 3: Adjustment for price distortions in the case of assets that are not traded internationally.

When adjusted financial prices will better reflect the economic values, in most cases, using the opportunity cost as a criteria of the good or service in question.

### Net additional value (NPV)

The following table summarizes the results of the present values for the only scenario considered:

- Baseline Scenario (SC0): With integration of the economic benefits of intercropping seedlings actions;

Désignations	Costs & additional advantages per year (1000 \$ US)															SUM updated to 6 %
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 à 30	
<b>1. Advantages</b>																
<b>a- with project</b>																
1.a.1 V.A.N. with project 1	4 733	3 964	3 462	3 081	3 201	4 799	6 627	8 684	10 926	12 424	13 688	14 500	14 915	15 132	15 132	138 115
<b>b- without project</b>																
1.b.1 V.A.N. sans projet 2	4 400	4 400	4 400	4 400	4 400	4 400	4 400	4 400	4 400	4 400	4 400	4 400	4 400	4 400	4 400	60 565
<b>Net Value Added 3=(1-2)</b>	333	-436	-938	-1 319	-1 199	399	2 227	4 284	6 526	8 024	9 288	10 100	10 515	10 732	10 732	77 550
<b>2. Costs</b>																
2.1 Investissement 4	1 820	11 883	14 622	15 040	10 743	0	0	0	0	0	0	0	0	0	0	36 375
2.2 Maintenance cost 5		1	14	40	67	93	106	106	106	106	106	106	106	106	106	1 166
2.3 Operational Cost 6		167	286	202	202	35	35	35	35	35	35	35	35	35	35	1 098
<b>total project cost 7=(4+5+6)</b>	1 820	12 051	14 921	15 282	11 012	128	141	141	141	141	141	141	141	141	141	46 645
<b>3.Additional Net Value</b>																
(Cash-flow) 8=(3-7)	-1 487	-12 486	-15 860	-16 602	-7 527	450	2 355	4 143	6 384	7 883	9 146	9 959	10 374	10 590	10 590	34 709
<b>Economic Rate of Return :</b>										<b>10,80%</b>						

## F.2. Technical Evaluation

*Please provide an assessment from the technical perspective. If a particular technological solution has been chosen, describe why it is the most appropriate for this project/programme.*

Section C.2 provides information on the logical relation between the proposed activities and the identified threats. In particular the following subsections are highlighted:

- Responding to identified threats;
- Mitigation logical framework;
- Adaptation component logical framework; and
- Proposed strategy.

## GRIEVANCE SYSTEM

The management grievance system aims at establishing an ongoing dialogue between the beneficiaries (men and women) and the various participants in the execution of the project. It tries to strengthen the participation, the satisfaction of the beneficiaries and empower gender equality.

The MGS objectives are to:

- Provide beneficiaries a system to handle complaints with respect of confidentiality of sensitive operational opinions at the local level.
- Establish at the project level effective administration / management mechanisms for complaint handling and an early warning tool allowing the management of some risks that can appear during the implementation phase (management of conflicts, reluctance, etc..).

### Grievance Procedures

During project inception workshops and the component launch workshops, stakeholders will be informed that any concerns relating to the design or management of the project, including social and environmental risks, that should be raised with the subcontractors, partners. Where these are not adequately addressed, these may be escalated to the project PMU and if necessary the ANDZOA and ADA.

### The grievance mechanism

The ANDZOA will establish a grievance management system characterized by a grievance reception desk:

- Accessible to all (beneficiaries, neighboring population, others ...);
- Anyone can file a claim or a complaint;
- The treatment will be done in full transparency and the complainant will be informed.

To do this, a reception desk for complaints and grievances will be opened in the PMU that will be responsible for monitoring the project. Also, the desk's branches will be opened in areas accessible to the public.

The desk will be distinct and recognizable in order to facilitate its identification by the public or anyone who wants to file a claim.

### The functioning of desk:

- A register for grievance recording. Each request is received, recorded in the register with a number. An acknowledgment of receipt is given to the person filing the complaint;
- The claim is then sent to the PMU, which will meet periodically to decide on claims. The answer is given to the complainant within a time limit not exceeding 15 days;
- In addition, the Web sites of the ADA and ANDZOA will be accessible to people who wish to file a complaint. This request is sent to the PMU for processing.

The project managers will conduct briefing and public awareness sessions. During these sessions, responses to complaints will be communicated. The data contained in this system will be compiled in order to produce a periodic (semi-annual) management reports and annual reports dealing with the status of all received complaints. This report includes:

- the number of received complaints;
- information about the beneficiary complainant (gender, age);
- the origin of grievances (province, area, perimeters, OPA);
- the type of complaint (written, oral);
- the number of complaints resolved.
- the nature of the complaint (company's activities, training, technical assistance, environmental and social impact, OPA, etc.);
- the average time to resolve the complaint;
- an appreciation and analysis of grievances and their management system.

All these tools ensure a strong population involvement of and therefore project sustainability.

## F.3. Environmental, Social Assessment, including Gender Considerations

*Describe the main outcome of the environment and social impact assessment. Specify the Environmental and Social Management Plan, and how the project/programme will avoid or mitigate negative impacts at each stage (e.g. preparation, implementation and operation), in accordance with the Fund's Environmental and Social Safeguard (ESS) standard. Also describe how the gender aspect is considered in accordance with the Fund's Gender Policy and Action Plan.*

The DARED project is under the framework of NAMA and the declination of the Green Morocco Plan through the development of arganiculture sector in the region of Souss-Massa, Essaouira and Guelmim. This project will contribute to the reduction of pressure on the argan and the improvement of income sources for beneficiaries. Particularly, the project will contribute to carbon sequestration and comes as a response to climate change issues in the region by contributing to the mitigation of the impacts of floods that characterize the region.

The assessment of the environmental and social impact and the establishment of the ESMP have been conducted through a screening of positive impacts and risks of negative impacts, as well as mitigation measures, in accordance with the safeguard policies of the Green Climate Fund (GCF). Note that no major impact has been identified and that the component 3 of the project will rather benefit capacity building components that contribute to environmental protection and to achieving the objectives of the GCF.

The risks and environmental and social negative impacts (minor risks) that have been identified are limited and will occur temporarily during the project implementation phase.

Environmental and Social Safeguard Principles	Element of compliance evaluation	Potential risks to manage before, during project implementation	Corrective and preventive actions
<i>PS1: Assessment and management of environmental and social risks and impacts</i>	The project's social and environmental classification is "B". The project will not generate adverse environmental and social impacts and risks. Instead, institutional strengthening of government and community institutions, coupled with management plans for the sustainable use of natural resources for income-generating, will contribute to providing proper care for the natural resources base and to improving livelihoods in the province. Negative environmental and social impacts and risks are minor and can be prevented and/or mitigated. The project includes an ESIA identifying environmental and social risks and impacts.	<ul style="list-style-type: none"> <li>- Difficulty in procurement of argan plants</li> <li>- Adherence of the population</li> <li>- Pollution</li> <li>- Lack or insufficient irrigation of argan seedlings</li> </ul>	Follow the environmental and social monitoring plan for the project
	Project Risk management gives priority to anticipation and avoidance first, before seeking to minimize or compensate for the effects of unavoidable risks		
<i>PS2: Labour and working conditions</i>	The project adopts an environmental and social management plan that identifies risks and provides for actions to be implemented to avoid, minimize or compensate for their effects.	Identified risks associated with environmental and social aspects (ESIA); Social risks for the project components	Follow the environmental and social monitoring plan, globally or by project component
	Environmental and social monitoring mechanism Complaints handling mechanism to implement		
<i>PS2: Labour and working conditions</i>	The project will be in conformity with the Labour Code /Morocco (code travail Maroc : bulletin officiel numéro 5210 du jeudi 6 mai 2004. Dahir n° 1-03-194 du 14 rejab 1424 (11 septembre 2003) portant promulgation de la loi n° 65-99 relative au code du travail. 2004.) Morocco has ratified ILO core labour standards.	The probable risk of non-equity is the difference in salary between men and women workers and workers in the low access of women to jobs at companies employed by the project.	It is necessary to include clauses related to the compliance with ILO labour rights and national standards.

	All activities planned in the framework of the project are in accordance with national and international laws	Limited institutional capacity for implementation of the ESMP (Environmental and Social Management Plan)	Development of a capacity building plan (information, training, etc.) to reinforce the capacities of institutions responsible for the implementation of the ESMP
	None of the proposed actions will generate negative issues on these population groups. All project activities help strengthen the resilience of the population and improving their socio-economic conditions	During the implementation of the actions the vulnerable groups susceptible to be impacted during construction or operating phases are not identified yet.	ANDZOA shall engage a survey investigation to identify vulnerable and/or marginalized groups that may be impacted during construction or operating phases  This measure will be included in the ESMP.
	The organizations and contractors responsible for the implementation of the project are subject to the law which requires a minimum of social protection for workers	Exposure to pollution, risk of workplace accidents	Implement the measures of the ESMP
	Organizations and enterprises in charge of implementing the project are subject to the law that prohibits child labor	No risk	Raising awareness and integrating binding clauses in the contract documents
<i>PS3: Resource efficiency and pollution prevention</i>	Due to the small scale of the project and its small footprint, very low amounts of waste are produced. Also, the energy and other raw materials are low.	Deterioration of water quality of the Oueds (Rivers) along the segments affected by the construction of infrastructure.	Conventional mitigation measures reported in the ESMP will be implemented.
	The project includes a component for the mobilization of rainwater for a better management of the resource "water". Energy requirements for the project are low.	No identified risk	Sensitivity for better irrigation techniques
	The Project reinforces resilience to climate change, and will not result in an increase in greenhouse gas emissions.	A temporary residual negative impact, with low intensity lies in low emissions of greenhouse gases during the construction of the structures.	Engage a climate check for the construction of the structures
<i>PS4: Community health, safety and security</i>	Apart from the risk of accidents that are controllable during the work phase, no project activity is generating negative impact on health.	risk of the spread of HIV spread in the community of workers during the construction phase and The risk of personal injury.	i) make workers aware of the disease ii) it is also necessary to take the measures recommended in the ESMP to avoid accidents. These measures must be integrated as clauses (health, security, HIV aids awareness) in specific technical specifications contracted with the companies responsible for the work.
	No action planned in this project, disagrees with the principles of human right.  The project will be in line with the these human rights stipulated by the Moroccan new constitution that enshrines human rights as universally recognized and stipulates the protection of these rights, taking into account their universality and indivisibility. The Moroccan constitution adopted all rights provided for in the Universal Declaration of Human Rights enshrined the primacy of international conventions ratified by Morocco	The implementation of some activities can induce a deviation of rights such as deterioration of the living or non-securing the work site during the construction phase.	It is necessary to include environmental and social clauses (health, security, social issues, HIV aids awareness) in specific technical specifications contracted with the companies responsible for the work.  This practice was initiated and implemented in the mega-project implemented under the compact millennium challenge account (MCC-USAID) and the Ministry of agriculture and fisheries in morocco. This model is well documented and can serve as an example. it has also been used for similar projects in the oasis of Tafilalet MCC project.

	on national legislation and affirmed Morocco's commitment to harmonize these legislation with the provisions of these conventions.		
<i>PS5: Land acquisition and involuntary resettlement</i>	No population in the zone will be subject to resettlement due to the project activities.	For physical actions, and after the final selection of the sites by localization, the risk of expropriation - Involuntary resettlement of the population may occur.	Possible measures to manage this risk are: i) search for an alternative site without involuntary resettlement, ii) stopping the activity
	The nature of the project involves an increase in local living standards through the expansion of the income sources of the beneficiaries	No identified risk	Avoid any alternative involving expropriation or population displacement
<i>PS6: Biodiversity conservation and sustainable management of living natural resources</i>	Some planned actions aim a better water resources management that will improve the conservation of biological diversity in oasis zones.	For physical actions, and after the final selection of the sites, the risk of deterioration of biodiversity (specially relicts or/and endemic species)	It is necessary to initiate a study to inventory and characterization of plant and animal biodiversity (fauna and flora) in the area of influence of the activity. In cases where the impact proves to be significant, the activity site should be moved to another location or to cancelling the activity
	The flood protection and water collection structures will enable the maintenance of benefits drawn from ecosystem.	Non-applying of good practice of irrigation and drainage can cause soil degradation by salinization. Another risk of non-conservation of water in the soil resulted from inadequate conservation practices.	Adoption (and training on) of practices of soil and water conservation: <ul style="list-style-type: none"> <li>- Leaching requirement to avoid salts accumulation in root zone</li> <li>- Superficial minimum tillage,</li> <li>- Mulching,</li> <li>- Soil organic amendment</li> <li>- etc.</li> </ul>
<i>PS7: Indigenous peoples</i>	Principle not applicable to the project	-	-
<i>PS8: Cultural heritage</i>	Project activities do not generate negative impacts on the natural and cultural heritage (NCP). Indeed, in addition to the choice of the site which should prevent any site or heritage building, the NCP is protected by legal texts (Loi- 22-80 relative à la conservation des monuments historiques et des sites, des inscriptions, des objets d'art et d'antiquités, etc. )	NO RISKS	-

#### Gender

Women and men will benefit from the same employment opportunities offered during the implementation phase. The ANDZOA and the entity responsible for the implementation of the activity specifies that the chances for gender equality will be considered in the proposed opportunities.

Component	Positive impact	Risks or negative impacts	Mitigation measure
Component 1 : Conduct argan growing (arganiculture) on 10 000 ha	Positive impact through improving income for men and women	- No risks	
	The construction work will impact the employment of both men and women	Risk of hiring men rather than women due to the nature of the work to be done ;	Specify the nature of the work, the skills required while highlighting equal chances for job opportunities

		Risk relating to work opportunity during the construction phase	
Component 2 : Structuration of upstream and downstream argan value chain	Both genders will take advantage of the work. This component will contribute to the employment of women and thus mitigate the risk of exclusion of women from the project  This component will also support wealth creation initiatives (ICR) to the benefit of young women.	Impact on other activities of women because of their occupation for the valuing of the argan products.	During the implementation phase, establish an assessment of women's activities in order to take them into account in the planning of the project and its activities
Component 3 : Capacity building, knowledge management, Co-management of Natural Argan Forest and scientific research promotion	positive impact on the capacity building of all stakeholders (men and women)	- No risks	

#### F.4. Financial Management and Procurement

*Describe the project/programme's financial management and procurement, including financial accounting, disbursement methods and auditing.*

ANDZOA has expertise in working with donor funds and has a good record of accomplishment in implementing or co-implementing many programme and projects using sound financial management practices. The major project currently implementing by ANDZOA is PACCZO which is financed by the Adaptation Fund.

ANDZOA has a Director of Administration and Finance and adheres to policies and procedures that meet donor agencies' requirements.

For this project, it will be responsible for fiduciary aspects and will be accountable for all financial and investment activities.

With regard to accounting policies and procedures, the principal regulatory framework for the project's financial management will comprise: (a) Morocco laws governing budget and financial management ANDZOA; and (b) the operating manuals and norms of ANDZOA, which include acceptable accounting policies and procedures.

Financial statements are prepared using the accrual basis of accounting and the standard chart of accounts accepted.

A specific bank account, in Moroccan currency (MAD), is set up for the project and resources are changed to the local currency according the project's requirements.

ANDZOA have an internal service reporting to the Director of Administration and Finance. This service is in charge of :

- Checking all payment support documents and ensuring compliance with the donor's hiring and procurement conditions
- Checking compliance with terms of contracts for the procurements of goods services, in regard to deliverables, deadlines, service conformity, amounts and characteristics or delivered goods or equipment, work assessments, and work progress reports; and
- ensuring payment vouchers comply with tax regulations.

Furthermore, ANDZOA has an internal audit committee designated by its Board of Directors that follows and controls an external auditing process. In addition, the administrative staff of ANDZOA has established periodic and spot-check reviews (in situ) of programmes' and projects' accounting and financing procedures. The purpose of these reviews is to verify the accuracy of the documents and to ensure that agreed activities have been implemented using internal regulations.

In addition, no financial management and procurement risk assessment was identified by AE. Also, ANDZOA is subject to well-defined expenditure commitment procedures in the rules which comes from the Law on Morocco public expenditure.

ANDZOA is conducting the project which's financing by Adaptation fund and monitoring by ADA as Accredited Entity. .

ADA and ANDZOA are two national agency under the Ministry of Agricultural and Fisheries and they are controlled by the same procurement guides and rules and for auditing.

GCF resources will be provided to the implementing partner. The funds will flow through GOM financial systems. Under ADA's implementation modality, ADA advances cash funds on an annual basis to ANDZOA (executing entity) for the implementation of agreed and approved program activities, in accordance with ADA standard policies and the ADA's procurement manual. ANDZOA reports back expenditure via a financial report on annual basis to ADA. Any additional requirements will be as in accordance with the AMA as and when it is agreed;

ADA will verify the following documents before it makes payments to ANDZOA: State expenditures as administrative and financial monitoring reports and according to the evidence provided by ANDZOA accordance with the expenditure forecasts..

ANDZOA will engage expenditures for works and goods according planned activities by :

- International and National competitive bidding for activities activity which amount is overall than 40 000 USD based on Quality and Cost Based Selection (QCBS). Payments terms will be specify into the Term of References for each activities and services..
- For services which cost less than 40,000 USD, ANDZOA may hire direct consultation procedure based on based on Least Cost Selection (LCS)

### **Procurement Plan**

ADA has comprehensive procurement policies in place as outlined. The policies outline formal procurement standards and guidelines across each phase of the procurement process, and they apply to all procurements in ADA.

In line with ADA procurement procedures, ADA will ascertain capacities of the ANDZOA as the Executing Entity by undertaking an evaluation of its capacity following the Framework for Cash Transfers.

In line with ADA's procurement procedures and cash transfer modalities, procurement under the project will be undertaken by ANDZOA as the Executing Entity.

Wherever procurement is carried out by ANDZOA and ANDZOA's partners, it will be fully aligned with Government regulations and procedures and will also have to be compatible with ADA's financial and procurement standards.

The procurement plan will cover the implementation period. The implementing entity update the procurement plan throughout the duration of the project annually by including contracts previously awarded. All procurement plans, their updates or modifications will be published on the website of the ANDZOA.

For international, national requirements apply to the various procurement and consultant recruitment methods used for the project by national and international competitive bidding, *an annex to the FP a detailed multi-year budget by natural classification.* -) Recruitment of Consulting Firms, Individual Consultants or contractor (national or international) goods is based on Quality and Cost Based Selection (QCBS) for each activity which amount is overall than 40 000 USD. -) Recruitment of contractor (national or international) for works is based on Least Cost Selection (LCS) for each activity which amount is overall than 40 000 USD. -) For the activity which amount is less than 40 000 dollars, is based on Least Cost Selection (LCS).

## G.1. Risk Assessment Summary

*Please provide a summary of main risk factors. Detailed description of risk factors and mitigation measures can be elaborated in G.2.*

The following risks have been identified:

*Financial risks:* No relevant risk has been identified in this category. ANDZOA has over 5 years of experience in managing, channeling, supporting and supervising project execution, with considerable success in carrying out its fiduciary responsibilities. Delay in securing co-financing, other than the endowment fund of ANDZOA, does not affect the proposed core activities. Given that partners is co-financing a no risk is associated with such a grant, planned to become effective before to start project activities.

For technical, social and environmental risks are showed below and developed in the ESIA report attached.

Risks
Risk of harming the biosphere of the argan tree in case of poor management and performance of the work in areas close to the biosphere reserve. Deterioration of biodiversity due to the work and the presence of equipment and the construction site.
Risk of altering archaeological sites
Change of the flow of water, this could negatively impact the population living downstream of the work site
Deterioration of water quality of the Oueds (Rivers) along the segments affected by the project implementation
Risk of soil contamination by site waste
Risk of gender inequality
Impact on air quality caused by the emission of greenhouse gases, dust and noise
Risk of accidents, health and safety Impact on the health and safety of the population
Involuntary resettlement and adherence of the population
Risk of discrimination for participation in events and fairs
Pressure on water resources: need to irrigate plants during the first 3 years at a rate of 2500 m <sup>3</sup> / ha / year, ie a total of 25 million m <sup>3</sup> / year for the entire area of 10 000 ha

More details are developed on ESIA and ESMP attached.

## G.2. Risk Factors and Mitigation Measures

*Please describe financial, technical and operational, social and environmental and other risks that might prevent the project/programme objectives from being achieved. Also describe the proposed risk mitigation measures.*

### Selected Risk Factor 1

Description	Risk category	Level of impact	Probability of risk occurring
Risk of harming the biosphere of the argan tree in case of poor management and performance of the work in areas close to the biosphere reserve. Deterioration of biodiversity due to the work and the presence of equipment and the construction site.	Social and environmental	Low (<5% of project value)	Low

#### Mitigation Measure(s)

*Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?*

- Conduct an awareness campaign among the different actors on the protection of RBA;
- Good organization of work and tailings management
- Avoid clearing plantations and ensure saving wildlife that thrives in the neighborhood of the site.
- Rehabilitate the areas affected by the construction site
- Add to the requirements specification for contractors, clauses relating to the protection of RBA

### Selected Risk Factor 2

Description	Risk category	Level of impact	Probability of risk occurring
Deterioration of water quality of the Oueds (Rivers) along the segments affected by the project implementation	Technical and operational	Low (<5% of project value)	Low

#### Mitigation Measure(s)

*Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?*

- Avoid spillage of waste and products in oueds or alluvium;
- Train site staff on food safety measures to comply with;
- Include environmental and social monitoring in the role of the technical assistant
- Ensure a good management of products used for the work
- Ensure a good management of tailings and waste produced by the workers
- Ensuring a good management of plants waste
- Check the condition of vehicles and machinery to prevent leaks and spills of petroleum products and hydrocarbons
- Implement a Hazardous Materials Management Plan and an action plan for spills
- Ensure proper management of pollutants
- Avoid materials releases into the oued or in the natural environment.
- Prevent leaks and spills of petroleum products and hydrocarbons.

### Selected Risk Factor 3

Description	Risk category	Level of impact	Probability of risk occurring
Risk of soil contamination by site waste	Social and environmental	Low (<5% of project value)	Low

#### Mitigation Measure(s)

*Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?*

- Collect waste water and site waste
- Minimize waste accumulation
- Disposing of waste in landfills authorized by the government
- Providing a wastewater collection system
- Always clean work areas, as well as the floor in case of dirt or deposits
- Build barricades around in polluting products storage tanks and prepare areas for the storage or handling of these products
- Plan on one (or more if necessary) cleanup kit (emergency bag containing several absorbent sheets)
- Restoring the work area

**Selected Risk Factor 4**

Description	Risk category	Level of impact	Probability of risk occurring
Risk of accidents, health and safety Impact on the health and safety of the population	Social and environmental	Low (<5% of project value)	Low

Mitigation Measure(s)

*Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?*

- Taking the necessary measures to prevent employment of children;
- Take the necessary measures to ensure that site staff is insured, is trained on accident and has acquired good practices and tools for safe work;
- Establishing a health check for onsite employees beforehand
- The company must designate a local clinic in case of accident, with an insurance covering all staff risks ;
- Establishing markup and temporary construction signage before starting the work
- Checking the speed of construction vehicles, especially nearby houses.
- Provide personal protective equipment for workers and site personnel.

**Selected Risk Factor 5**

Description	Risk category	Level of impact	Probability of risk occurring
Pressure on water resources: need to irrigate plants during the first 3 years at a rate of 2500 m <sup>3</sup> / ha / year, ie a total of 25 million m <sup>3</sup> / year for the entire area of 10 000 ha	Social and environmental	Low (<5% of project value)	Low

Mitigation Measure(s)

*Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?*

- Water resources are already experiencing overexploitation, due to a significant demand for irrigation water. To compensate for this additional demand, the project includes rainwater catchment actions and, possibly, water points to construct upon authorization of ABH.

**Selected Risk Factor 6**

Description	Risk category	Level of impact	Probability of risk occurring
Involuntary resettlement and adherence of the population	Social and environmental	Low (<5% of project value)	Low

Mitigation Measure(s)

*Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?*

- Avoid any site that may cause population displacement or any dispute in the accurate identification process

- Reaffirming the commitment of the population before the project starts (to be done by ONCA and ANDZOA).

**Other Potential Risks in the Horizon**

*Please describe other potential issues which will be monitored as "emerging risks" during the life of the projects (i.e., issues that have not yet raised to the level of "risk factor" but which will need monitoring). This could include issues related to external stakeholders such as project beneficiaries or the pool of potential contractors.*

**no others risks have been identified**

*\* Please expand this sub-section when needed to address all potential material and relevant risks.*

## H.1. Logic Framework.

Please specify the logic framework in accordance with the GCF's [Performance Measurement Framework](#) under the [Results Management Framework](#).

### H.1.1. Paradigm Shift Objectives and Impacts at the Fund level<sup>19</sup>

#### Paradigm shift objectives

<i>Shift to low-emission sustainable development pathways</i>	The project will preserve the only biosphere reserve of argan in the world by mitigation to climate change and help carbon sequestration. The project will create enabling conditions for stakeholders to develop arganiculture orchards in line with the NAMAs. The project is a first step to help unlock the whole potential of carbon sequestration in the RBA.
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Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term (if applicable)	Final	

#### Fund-level impacts

<i>M4.0 Reduced emissions from land use, reforestation, reduced deforestation, and through sustainable forest management and conservation and enhancement of forest carbon stocks</i>	<i>M4.1. Tonnes of Carbon dioxide equivalent (t CO2 eq) reduced or avoided as a result of GCF-funded projects/programmes—forest and land-use subindicator</i>	<i>Average hectares planting for arganiculture tree</i>	<i>0 T CO2 eq</i>	-200 000 t Co2 eq	-604 223,30 T CO2 eq	- 10 000 hectares on arganiculture orchards are planting ; 2- best practices and knowledge is adopted by stakeholders and partners Co-financing is mobilized
<i>A1.0 Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions</i>	<i>A1.2 Number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options (including fisheries, agriculture, tourism, etc.)</i>	<i>Data collected from families participating in DARED project collected from internal reports biannually and annually</i>	<i>0 beneficiaires</i>	13 000 beneficiaires	26 000 beneficiaires	10 000 hectares on arganiculture orchards are planting ; 2- best practices and knowledge is adopted by stakeholders and partners Co-financing is mobilized

<sup>19</sup> Information on the Fund's expected results and indicators can be found in its Performance Measurement Frameworks available at the following link (Please note that some indicators are under refinement):

[http://www.gcfund.org/fileadmin/00\\_customer/documents/Operations/5.3\\_Initial\\_PMF.pdf](http://www.gcfund.org/fileadmin/00_customer/documents/Operations/5.3_Initial_PMF.pdf)

H.1.2. Outcomes, Outputs, Activities and Inputs at Project/Programme level						
Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term (if applicable)	Final	
<b>Project/programme Outcomes</b>	<b>Outcomes that contribute to Fund-level impacts</b>					
M9.0 Improved management of land or forest areas contributing to emissions reductions	<i>M9.1. Hectares of Land or Forests under improved and effective management that contributes to CO2 emission reductions</i>	Surface of planted on Arganiculture Programme of HCEFLCD Morocco Green Plan	0	5000	10000	through the ANDZOA implanting project collects detailed data planting and also through the HCEFLD collecting data on deforestation . Project will provide better estimates of carbon avoided
<i>Specify other expected results</i>						
<i>Specify other expected results</i>						
<b>Project/programme outputs</b>	<b>Outputs that contribute to outcomes</b>					
<b>Component 1: Implementation of the arganiculture on 10 000 ha</b>						
1.1.1.Arganiculture on 10,000 ha	Number of hectares	Supervision report/annual report	-	5000	10000	Implementing 2000 ha per year
1.1.2.Intercropped seedling on 2000 ha	Number of hectares	Supervision report/annual report	-	1000	2000	Implementing 400 ha per year
1.3.1.Implementation of Water harvesting and water and soil conservation	Number structures created	Supervision report/annual report	-	40	40	Implementing 18 structures per year
1.4.1.Technical assistance and works supervision	Number of supervised hectares	Supervision report/annual report	-	5000	10000	According to work progress
<b>Component 2: Structuration of argan value chain</b>						
2.1.1.mobilization and supervision of the fruit producers and farmers and their professional organization (OP).	% Number of farmers and right holders supervised in 15 targeted production perimeters	annual report	-	80% of 7 perimeters	80% of 8 perimeters	The aim is to mobilize 80% of the number of beneficiaries in the 15 production perimeters
2.1.2.Support GIE creation	Number of GIEs created and accompanied	annual report	-	5	7	11 GIE creation with at least 3 cooperatives per GIE

2.2.1.Argan product collection units implementation	Number of argan product collection units implemented	annual report	-	5	7	Each GIE will be equipped with a collection unit
2.2.2.Installation of argane oil extraction unit	Number of argan oil extraction units implemented	annual report	-		1	1 pilot units will be installed in the region
<b>Component 3 : capacity building, knowledge management and research promotion</b>						
3.1.1.Information and training on climate change challenges and RBA	Number of training workshops/modules	annual report	-	2	2	Inform / train institutional actors in sectors most affected by CC
3.1.2.Reinforcement of technical and management of beneficiaries	Number of beneficiaries supported	annual report	-	30% of direct beneficiaries	80% Direct beneficiaries	The goal is to reach 80% of direct beneficiaries
3.2.1.Support for the implementation of the Argan National Center (CNA)	number of studies	annual report	-	1	2	Provide to CNA some working tools
3.2.2.Support for the concretization of the Argan Research-Innovation Federator Program.	Number of initiatives and projects supported	annual report	-	10	10	Implementing the research program by supporting 20 initiatives
<b>Activities</b>	<b>Description</b>	<b>Inputs</b>		<b>Description</b>		
<b>Component 1: Implementation of the organiculture on 10 000 ha</b>						
1.1.1.Arganiculture on 10,000 ha	Planting 10,000 ha of organiculture	Planting 10000 ha		beneficiaries, finalize the sites and select		
1.1.2.Intercropped seedling on 2000 ha	WFP cultivate PAM intercropped seedling with organiculture	Planting 2000 ha		educate beneficiaries, finalize the sites and choose		
1.3.1.Implementation of Water harvesting and water and soil conservation	Build 80 rainwater harvesting and water conservation and soil structures	Constructing 80 structures		educate beneficiaries, finalize the sites and choose contractors		
1.4.1.Technical assistance and works supervision	Work supervision of activity 1.1.1 and 1.1.2.	Supporting work supervision		Select TA Office		
<b>Component 2: Structuration of argan value chain</b>						
2.1.1.mobilization and supervision of the fruit producers and farmers and their professional organization (OP).	mobilization of the fruit producers and farmers and their professional organization (OP).	beneficiaries and create cooperatives		Finalize the list of beneficiaries and choose the specialized engineering consultant		
2.1.2.Support GIE creation	Creation of 11 GIE	Educate cooperatives and create GIE		Choose specialized engineering consultant		
2.2.1.Argan product collection units implementation	Implementing 11 collection units of "afyach"	Improve the argan products collection		Select site; choose companies that will build and equip the units		

2.2.2.Installation of argane oil extraction unit	Installation of 1 argan oil extraction units	Value argan oil	Select the sites; choose companies that will build and equip the units
Component 3 : capacity building, knowledge co management and research promotion			
3.1.1.Information and training on climate change challenges and RBA	sensitization of stakeholders	Information and training	Choose specialized engineering office
3.1.2.Reinforcement of technical and management of beneficiaries	Training of beneficiaries	Technical and collective management training	Choose specialized engineering office
3.2.1.Support for the implementation of the Argan National Center (CNA)	Support CNA establishment	CNA functional	Equipment of CNA and studies elaboration
3.2.2.Support for the concretization of the Argan Research-Innovation Federator Program.	Support the concretization of the content of argan innovative research Federator Program sought	implementing the Research Program	Call for a manifestation of interest and select initiatives

## H.2. Arrangements for Monitoring, Reporting and Evaluation

*Besides the arrangements (e.g. semi-annual performance reports) laid out in AMA, please provide project/programme specific institutional setting and implementation arrangements for monitoring and reporting and evaluation. Please indicate how the interim/mid-term and final evaluations will be organized, including the timing.*

The monitoring plan will be aligned with the logical framework and will be targeted for each component, outcome and activities levels.

The project PMU will have a dedicated professional who will manage the M&E programme and develop all the reporting mechanisms, using up-to-date information produced by the project.. The M&E system will be designed to provide detailed data and analyses that can be used by the PMU to oversee and manage the execution of activities, assess stakeholders' response to these activities, and formulate project modifications to address any problems that may arise.

Over the life cycle of the project, the PMU will report on the implementation of the project's workplan, on indicator data and on proposed changes in activities/design. The project reporting frequency and project level evaluations will be semi-annual, aligned with the requirements set by ANDZOA, ADA and GCF. The latter will be based on analyses of reasons for differences between expected and actual levels of project activities, counterpart behaviours, and indicator values. The reports will include a 'lessons learned' component that provides input for developing proposed changes in project activities and insights for future activities during the life span of the project. PMU will explicitly link the monitoring plan with lessons learned during the project's activities. This information will be uploaded in the project-created knowledge management system, which will develop a unified mechanism for identifying lessons from evidence.

During the project post-implementation period, ANDZOA and ADA will ensure that monitoring and reporting to the GCF will continue for five more years. This is possible as due to its long-term commitment in the intervention area and the stakeholders. A proposed M&E plan for post-project implementation is developed in the ESIA and ESMP of the DARED.

### Methods, tools and techniques

#### *Dynamic implementation–monitoring of project activities*

Monitoring of project activities will be achieved through management actions, including monthly briefings with the GCF, weekly staff meetings, and review of staff and adviser inputs to quarterly reports. A system will be established to channel counterpart responses through activity feedback forms, and the findings will be incorporated in recommendations for changes as needed.

Specific issues addressed in these feedback forms will include the quality of technical assistance provided by the project, the quality and timeliness of the implementation data provided by the project, and the recipients' response to project assistance.

#### *Dynamic implementation–monitoring results*

Performance monitoring involves two related tasks: (a) analysing realized indicator values; and (b) evaluating the overall results and impacts of the project. Realized (actual) indicator values will be analysed, focusing primarily—but not exclusively—on those indicators whose values differ significantly from proposed levels. The question, "Why the difference?" will be answered, and findings will be incorporated in recommendations for changes in indicator values, specific tasks or expected results.

Specific issues to be addressed include the quality of reported data, such as timing and data classification, operation of the data collection and reporting system, how related tasks were implemented, how recipients responded to assistance as contrasted with expectations, and how closely indicator values are a function of identified tasks.

#### *Progress reporting*

The M&E system will provide information regarding project execution; progress towards achieving key targets; and, probability to meet impacts and outcomes. The Project Coordinator will prepare reports for each regular meeting of the ANDZOA and ADA. An outside independent third party will conduct the mid-term review and the end-of-project evaluation. The mid-term review and the end-of-project evaluation will be presented by the consultants to the ANDZOA and analyzed in detail with the PMU. Lessons learned will be documented and communicated to the GCF, the GOP and the community of development practitioners. The GCF will be briefed on a regular basis and as needed.

#### **Monitoring of capacity-building**

The project will provide support for capacity-building to increase the sustainability of project investments. During implementation, the project will create various indicators (e.g. number of people trained, number of government offices supported) representative of the progress of building government capabilities, and of communities' and associations' capacity to develop plans to manage natural resources and implement activities for the creation of sustainable livelihoods in order to promote trade, investment and private-sector development.

#### **Proposed indicators**

The proposed indicators are linked to project objectives and outputs. Indicators were selected based on the scope of each result and the specifics of the activities involved. Each indicator in table H.1 is related to the corresponding desired output. These indicators will be continually reassessed throughout project implementation,

#### **Data collection and reports**

Many of the required outputs and results will be available as a result of our direct engagement with counterparts on specific activities such as training events, facilitation workshops and development of consulting services. Accordingly, the project team will be made aware of those indicators relevant to their specific areas and will be tasked with collecting the information to be inputted in the M&E database as events take place. For other indicators, we will work with counterparts to obtain reports, administrative records or other files available on a timely basis.

## I. Supporting Documents for Funding Proposal

- NDA No-objection Letter
- Feasibility Study
- Integrated Financial Model that provides sensitivity analysis of critical elements (xls format, if applicable)
- Confirmation letter or letter of commitment for co-financing commitment (If applicable)
- Project/Programme Confirmation/Term Sheet (including cost/budget breakdown, disbursement schedule, etc.) – see *the Accreditation Master Agreement, Annex I*
- Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management Plan (If applicable)
- Appraisal Report or Due Diligence Report with recommendations (If applicable)
- Evaluation Report of the baseline project (If applicable)
- Map indicating the location of the project/programme
- Timetable of project/programme implementation

*\* Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*





Ministère délégué auprès du Ministre de l'Energie,  
des Mines, de l'Eau et de l'Environnement,  
chargé de l'Environnement

الوزارة المنتدبة لدى وزير الطاقة والمعادن  
والماء والبيئة، المكلفة بالبيئة

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La Ministre

الوزيرة

We confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Sincerely,

Her Excellency Ms. Hakima El Haité  
Minister delegate in charge of Environment

La Ministre déléguée auprès du Ministre  
de l'Energie des Mines de l'Eau et de  
l'Environnement, chargée de l'Environnement

Hakima EL HAITE

## Environmental and social report(s) disclosure

Basic project/programme information	
<b>Project/programme title</b>	Development of argan orchards in degraded environment (DARED)
<b>Accredited entity</b>	ADA Morocco
<b>Environmental and social safeguards (ESS) category</b>	Category B

Environmental and Social Impact Assessment (ESIA) (if applicable)	
Date of disclosure on accredited entity's website	2016-09-01
Language(s) of disclosure	English, French
Link to disclosure	<a href="http://www.ada.gov.ma/web/etude/">http://www.ada.gov.ma/web/etude/</a>
Other link(s)	http://
Environmental and Social Impact Assessment (ESMP) (if applicable)	
Date of disclosure on accredited entity's website	Click here to enter a date.
Language(s) of disclosure	
Link to disclosure	http://
Other link(s)	http://
Resettlement Action Plan (RAP) (if applicable)	
Date of disclosure on accredited entity's website	Click here to enter a date.
Language(s) of disclosure	
Link to disclosure	http://
Other link(s)	http://
Any other relevant ESS reports and/or disclosures (if applicable)	
Description of report/disclosure	
Date of disclosure on accredited entity's website	Click here to enter a date.
Language(s) of disclosure	
Link to disclosure	http://
Other link(s)	http://